

NEW MANAGERIAL ARCHETYPES IN HIGHER EDUCATION



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The following figures and tables have been omitted on request of the university –

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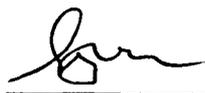
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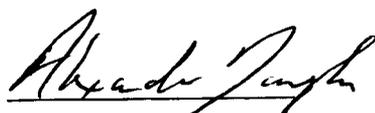
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Abstract

This research identifies the prevalent external forces that have been a catalyst to change in governance and management structures in UK universities. It reviews the effects of growing commercialisation against a backdrop of changing funding dynamics. The study included the political forces that have transformed higher education, alongside the proliferation of managerialism. It examines these effects against traditional welfarist and altruistic views of education, further investigating the differing management structures and archetypes that exist.

In addition to this, the research reviews the effects of these forces against the more complex university typology of ancient, red brick, plate glass and new institutions.

Utilising the pragmatic philosophical underpin the research employs mixed-methodological approaches of qualitative exploratory desk research, quantitative questionnaires and ultimately qualitative interviews. These entailed the analysis of data both inductively and deductively. Questionnaire and interview surveys were undertaken on UK universities on a range of staff groups within institutional hierarchies. These include senior management groups, teaching and research staff, and administrative staff to provide a diverse and reflective range of responses from all staff members.

The research has identified changing notions of collegiality and traditional academic autonomy towards more managed and corporate focused management structures. It has further uncovered disparate approaches that exist against the various institutions as a factor of age of establishment rather than solely on type.

It contributes to the current body of knowledge by amalgamating the different external forces and reviewing its effects on university management, further uncovering these management structures to exist as dominant-institutional and sub-segmented or sub-structural forms alongside cultural permutations. The research further posits that the established dichotomy of traditional and new universities inaccurately reflects the complexity of the higher education sector within the UK.

Chapter 1.0 Introduction

Fluctuations and alterations within the environment by which university education operates have increased the proliferation of management ideologies and for-profit orientation into traditional collegial institutions of public good. This has had an effect on the HE sector within the UK. These external forces have been catalyst to the growth in application of private-sector techniques and management ethos with increased focus upon ensuring efficiency, effectiveness and economy (Dearlove, 2002; Deem, 2004; Dixon *et al.*, 1998; Pollitt, 1990; 2003). This differs from the traditional management ideologies of collegiality and scholarly freedoms, and instead promotes a regime of increased scrutiny and accountability (Anninos, 2007; Bowden and Marton, 1998; Eustace, 1987).

The commercialisation of education alongside the assimilation of managerialism into public services have required universities to rethink and restructure to change with the times (Deem *et al.*, 2007; 2008). The political forces within the UK of Conservative and Labour Governments, together with the various reports and Acts of Parliament have further compounded the issues and fluctuations within university management structures and styles (Henkel, 2000; Pollitt, 2003; Shattock, 2006; Tomlinson, 2001).

The traditional university of scholars managing scholars and autonomy is being challenged by other new management archetypes that have stemmed from a need to remedy and counteract the prevalent external environmental forces (Chitty, 2004; Deem, 2006; Eustace, 1982). Moreover these changes are not restricted to traditional universities, the newer universities (former polytechnics) are not immune to these changes and pressures (Gray, 1989; Henkel, 2000). The growth of globalisation alongside the introduction of tuition and top-up fees (Onsman, 2008; Tomlinson, 2005; Wagner, 1998) fuels the proliferation of managerial rhetoric and corporate paradigms and its assimilation into public services and HE (Kitagawa, 2005; Morey, 2004; Owen-Smith, 2003). The interesting disparity between the altruistic ethos of education as public good amidst increasing commercial pressures to remain profitable highlight strong contradictory focuses in the established orientation and goals of university learning (Anninos, 2007; Dearlove, 1995). These changes have inevitably transformed the existent management structures within universities asserting both change and an environment geared for change.

These issues have seldom been discussed holistically; instead each of the prevalent external forces has been examined in singularity against the accustomed dichotomy of traditional and new universities. The majority of studies endeavouring to examine these forces and its effects on university management have either utilised solely qualitative or quantitative methodologies (table 1.1). Moreover the more elaborate university typology of ancient, red brick, plate glass and new universities as highlighted by Duke (1992), Beldoff (1968), and Truscott (1943) suggest the existence of more complexity within the university sector as opposed to the established binary divide (Henkel, 2000) (see chapter 2.26 and 2.27) positing a gap in the current body of knowledge. As such the research highlights an ideological need in terms of the amalgamation of various external forces and its effects on diverse university management structures contrasted against university typologies for inquiry. Moreover, a methodological gap in the current body of research exists, with utilisation of mixed methodologies or a pragmatist philosophical paradigm potentially resulting in new conclusions, adding to current knowledge in the area.

1.1 Research aims and objectives

This research study aims to examine and analyse the different management structures that exist in Higher Education (HE) focusing upon UK universities. The study further aims to explore the numerous external factors such as changes in funding, increased local and international competition, managerialism in public services and commercialisation of global education that have affected or have been catalysts to the changes in University structure and movement away from more altruistic ideologies of learning. Whilst existing research has focused mainly on examining factors that contribute to management changes, this study will effectively look into the structural changes and management techniques assimilated into universities that were brought about by external and environmental forces.

Through identification of these different external factors, the study aims to develop a representative framework of issues affecting university structures. It should be noted that the research study does not aim to develop a new management structure for universities but seeks to extend the current information base of structures in HE with new data within the current environment of change, intending to identify major issues that affect

university management. This will lead to better focus on valid and genuine forces that HE governance can seek to remedy.

To satisfy the aims of this study the following broad objectives were identified for examination.

- To identify significant areas of change with regards to HEI structures and management

There is a plethora of literature discussing the erosion of traditional collegial structures in universities that promoted autonomy and academic freedom within many Higher Education Institutions (HEIs) now favouring more corporate management techniques and structures. The movement towards managerialism is partly caused by changes in government policy and funding together with an increased need to compete with other universities. This is potentially truer for the 'New Universities' than for "ancient" and "older" Universities that inherently possess considerably more independence and control of their management.

This objective aims to review these changes in universities, determining the previous structures that exist and the new approaches undertaken today. Examining these issues will enable better understanding of the changes in HEI management structures.

- To explore the different external forces that have been a catalyst to changes in Higher Education (HE) management.

Numerous external forces affect the management of HEIs, namely the changes in government policies and funding together with the entry of managerialism and commercialization in HE today. These forces have undoubtedly affected the *raison d'être* of universities to provide HE and disseminate research, towards more business minded goals of meeting objectives, attracting funding and students and remaining profitable. Such changes in HE management and direction inevitably create an environment that endorses more corporate management structures existent in the private sector.

Examination of these external environmental forces would potentially highlight key issues relevant in satisfying the aims of this study.

- To develop a representative framework of different external and internal forces that affect university structure.

The compilation of qualitative data and statistical analyses will provide a holistic view of HE management today. The development of a representative framework depicting the existent external forces affecting HEIs will provide considerable reflection and overview into the changes in HE. Its findings can provide valuable insight, alongside useful current and factual data, for university managers and individuals involved in HE sector on the issues affecting management and structure. It aims to extend the current field of knowledge by uncovering new and novel forces that could be affecting university management.

- To identify archetypal forms of university management and structure as a product of prominent external forces that affect the different university types.

This objective aims to amalgamate the different qualitative and quantitative results and findings to highlight new archetypes and management structures that have been formed as a result of the changing external environment that universities operate in. It aims to contribute to and extend the present knowledge base of current university management through identifying disparities and differences that exist in the various university typologies. This seeks to challenge current conceptualisations of singular forces on HEIs potentially indicating more complex dynamics and issues that need to be considered by university management.

1.2 Methodological considerations

The research seeks to identify the existence of different external forces alongside the prevalence of dominant management archetypes of structures within universities within the UK. The dynamics of such objectives require utilisation of mixed methodological approaches and paradigms to adequately satisfy the needs of the research. As such the 'pragmatic' philosophical approach was utilised to effectively employ a range of

methodological instruments available for research, selecting the methods that best fits the needs of the study (Saunders *et al.*, 2007).

The intrinsic nature of secondary data and literary sources by which to gauge and establish the different extant forces required utilisation of qualitative and less mechanistic methodologies by which to inductively identify their existence (Miles and Huberman, 1994; Saunders *et al.*, 2007). Examination of current and past discourse in the area provided a means to identify the prevalent and recurring issues, which were then categorised into themes. These issues were examined to saturation (Miles and Huberman, 1994) with the majority of further identified issues matching thematic findings.

The approach is then built upon deductively through conducting quantitative survey methodologies through which to 'test' the effects these forces have on university typologies (Bryman and Bell, 2007). Utilising novel online/electronic methodologies by which to gather questionnaire responses the approach sought to elicit a wide and diversified range of responses from staff members within UK universities. The online questionnaire was utilised as an effective means by which to effectively gather an extensive range of responses which would more accurately reflect the diverse typologies of ancient, red brick, plate glass and new universities, against the different staff groups of university senior management, teaching and research staff and administrative staff.

These approaches are then further examined through a final qualitative context, seeking to uncover 'richer' details (Saunders *et al.*, 2007) into the effects of these external forces against the different university and staff groups through interviews, amalgamating the issues identified in earlier qualitative and quantitative methods.

Given the use of qualitative secondary desk research, followed by quantitative questionnaires and ultimately qualitative interviews, the applied methodologies allow triangulation for reliable and valid conclusions.

Employing a pragmatist philosophical underpin the research utilises an inductive-deductive-semi-inductive paradigm matched with qualitative secondary research and quantitative questionnaires followed by qualitative interviews.

Figure 1.1 provides a conceptual overview of methodological approaches with a detailed breakdown of the phases of the research study available in chapter 4.

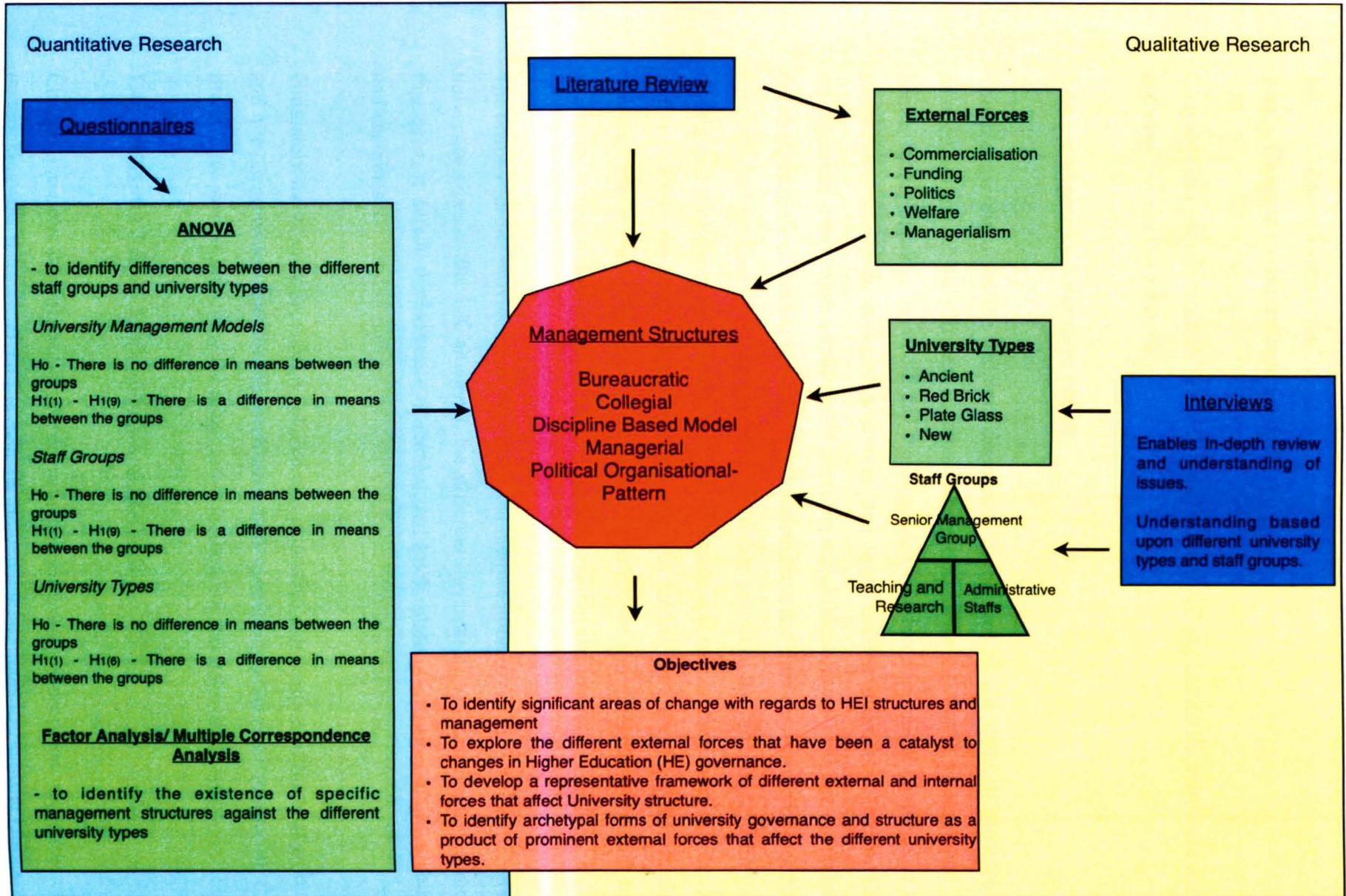
1.3 Contribution to knowledge.

The research examines and identifies the different external forces that have affected university management within the UK. While some of these forces have been examined previously – issues of welfare (Ambos *et al.*, 2008, Anninos, 2007; Bowden and Marton, 1998; Eustace, 1982; 1987), quality management (Bleiklie and Kogan, 2007; Harvey, 2002a; Kanji and Tambi, 1999), efficiency measures (Dearlove 2002, Dixon *et al.*, 1998), managerialism (Deem *et al.*, 2007; Deem and Brehony, 2005; Pollitt, 1990; 2003; Trowler, 1998), political forces (Chitty, 2004; Henkel, 2000; Pollitt, 1990; Shattock, 2006; Tomlinson, 2001), manager-academics (Deem, 2004; 2006), funding dynamics (Dearlove, 2002; Etzkowitz *et al.*, 2000; Page, 2004; Shattock, 1998) and commercialisation (Ambos *et al.*, 2008; Bloland, 1999; Denman, 2005; Hendry and Dean, 2002), these have been examined in singularity. This study intends to review in amalgamation the effects these forces have on university management structures and archetypes.

The study also seeks to examine these issues against a more reflective university typology and grouping as opposed to the accustomed dichotomy of traditional and new university segmentation (Duke, 1992). Usage of ancient, red brick, plate glass and new university (*ibid*; Beldoff, 1968; Truscott, 1943) typologies allow findings and conclusions to be applied more specifically to the respective groupings.

The research further aims to contribute to practice as well as seeks to affect change in both current methods of university management and understanding. The identification of specific management archetypes and structures against specific university types would provide valuable information and guidance on management orientation and ideologies that would benefit from better realisation and understanding of key forces and issues. An intention is that the identification of specific archetypes against a specific university type would enable better understanding by which to manage and affect change, as well as remedy the negative effects of these external forces.

Figure 1.1 Conceptual Map of the Research Methods Utilised



1.4 Chapter Summaries

1.4a Chapter 1 – Introduction

Chapter 1 has put this research firmly in the context of HE and has detailed the main aims and objectives of this research.

1.4b Chapter 2 – Literature review

This chapter discusses the different discourses in the area of the study. It provides a detailed review of the different external forces that affect university management. It begins by highlighting the traditional welfarist view of education and its contribution to social good alongside collegial structures that were once a mainstay of university management. The chapter continues by detailing the political forces from the 1960s and the changes in Conservative and Labour Administrations and their respective policies that have affected the face of higher education. It further examines the different government reports and its respective recommendations alongside the end of the binary divide. In addition to this, the chapter examines the changes in funding and funding dynamics and discusses the growth of managerialism, commercialisation and globalisation within the university setting and its effects of management orientation and focus.

The chapter further provides clear typographical interpretation of the different and diverse university types in the UK alongside the different hierarchical and structural dynamics that exist. It details the existence of ancient, red brick, plate glass and new universities and examines the varying management structures and models that exist.

Ultimately the chapter provides a detailed and expansive examination of the background and prevalent issues into the research area both providing a succinct review of the literature as well as informing the quantitative methodological stage of the study.

1.4c Chapter 3 & 4 – Methodology and Methods

Chapter 3 reviews the different available methodological and philosophical approaches in undertaking this research given the specific limitations and logistical considerations. It begins by discussing the different philosophical underpinnings that provides the

ideological and theoretical beginnings of research approach and methodology with due consideration of the nature and scope of this research, further discussing the potential usage of interpretivist and positivist philosophical approaches. Ultimately it identifies the usage of a pragmatist paradigm, which posits utilisation of available methods that best fits the needs of the research, leading to the acceptance of a mixed methods application for the purposes of this study.

Chapter 4 further details the methods utilised in undertaking primary data collection. It discusses the qualitative exploratory desk research utilised in phase 1 of the study followed by a discussion on quantitative questionnaire usage in phase 2. Finally phase 3 utilises qualitative interview surveys and seeks to amalgamate the findings from different deployed methods to provide holistic and accurate results. The chapter discusses the rationale between method selection and identifies the research approach that best fits the needs of the study further detailing the steps, procedures and protocols utilised in the data collection stages undertaken, building upon the methodological considerations detailed in chapter 3. Chapter 4 concludes by highlighting the sampling ideology and techniques, logistical considerations, issues of reliability and accuracy, and confidentiality strategies utilised.

1.4d Chapter 5 – Findings

This chapter discusses the different results from the methodological stages of the research. It begins by highlighting the different external forces and identified organisational structures as highlighted by exploratory research undertaken on secondary data. The usage of the NVivo software package is highlighted with a graphical representation of findings in this first qualitative phase presented.

The second part of this chapter deals with providing the statistical findings and results as gathered from the analysis of questionnaire data. Statistical analysis in the form of descriptive statistics, ANOVAs, Multiple Correspondence Analysis, bivariate tests and factor analysis was undertaken on data using the SPSS software package. This section presents the different statistically significant findings that identify differences in staff perceptions at the different university types. It identifies the existence of prevalent

management archetypes and perceptions that exist within different university typologies and staff groups.

The chapter further details the qualitative findings of the final interview stage of the research highlighting the different triangulated issues based upon university and staff groups. These issues are additionally examined within the context of individual university type and staff group providing more extensive findings of prevalent triangulated themes emanating from the specific university and staff segments.

It concludes by providing an overview of the main findings and issues identified by the various stages of the research methodology.

1.4e Chapter 6 – Discussion and Contributions to Knowledge

This chapter discusses the different findings of the study alongside consideration of literary foundations detailed in the literature review chapter. The chapter highlights the ramifications and context of qualitative and quantitative findings and its relation to current discourse and knowledge. Through discussion this chapter seeks to answer the questions and objectives of the research through exploration of how research findings relate to the current structural and management considerations in UK universities. It further details these differences and the associated external factors against the different university types, identifying potential managerial archetypes or management structures.

The chapter further examines the findings of this research and its contributions to both current knowledge and understanding, examining its ability to affect change and practice. The limitations of this study alongside the new avenues for potential further research are examined in this chapter.

1.4f Chapter 7 – Conclusion

The chapter seeks to finalise the different findings of this study providing a summary of the chapters and issues identified while highlighting the satisfaction of the objectives of the research. This chapter further reiterates the contribution to the current knowledge base and endeavours to affect change and understanding of university management structures.

It concludes by both recognising the limitations of the study and poses potential questions and avenues for further and future inquiry.

Chapter 2.0 Literature Review

2.1 Introduction

This chapter reviews the current literature base within the area of the research. It discusses the collegial underpin alongside the traditional academically centred management ethos of universities within the UK. It highlights the different political issues that have been catalyst to changing university orientation and management detailing a number of governmental reports and policies since the 1960s.

The chapter further discusses the changes and effects of altering funding dynamics and amounts on university management amidst growing assimilation of managerial tendencies and managerialism into university management focus. It further details the growth in commercial agenda and globalised university operation and competition in the current environment, examining these forces and its related effects on UK universities.

In addition to this, the chapter provides background understanding and review of the different existing typologies of universities within the UK and the growth of prevalent management models or structures within institutions. Ultimately the chapter examines in detail the growing external forces that have had an impact on university management and structure and sets the scene for the research by highlighting the existing gaps within the extant literature.

Bush (1985; 1996; 1999; 2003) highlights that the field of education management is concerned more so with the operation of organisations underpinning the different issues related to the management of the institution rather than solely the application of theory. As such the field to a large degree focuses on remedial action towards the different issues than affect good institution management. Indeed Bush (2003: p25) highlights that there is “no single all-embracing theory of educational management...it reflects the multifaceted nature of theory in education and the social science”. Likewise Ribbins (1985 in Bush, 2003: p25) states that “students of educational management who turn to organisational theory for guidance in their attempt to understand and manage educational institutions will not find a single, universally applicable theory but a multiplicity of theoretical approaches each jealously guarded by a particular epistemic community”. Moreover English (2001) posits that education management theory can be based upon and arise

from observations of practice, developing these concepts into theoretical frames. For the purposes of this study, it is important to note the scope of this research focuses on the different external forces that affect higher education management. While a clear theoretical concept would be amicable to the needs of this research, the very nature of education management provides little clear frameworks. As such the study seeks to utilise the different forces as part of this framework, building on English's (2001) understanding of theory arising from observations of practice. Moreover a number of discourses within the field mirror this approach providing empirical understanding through observation of the existent forces in the external environment. This study examines these discourses as part of a review and exploration of empirical evidence.

2.2 The collegial university of learning

Universities are seen as organisations of learning involved with research, debate and the discovery of new knowledge, seeking to provide not only excellence in teaching but outstanding scholarly research and learning (Bowden and Marton, 1998; Buckland, 2004). These institutions are not only involved in knowledge creation but have a key role in the pursuit and dissemination of new discoveries, engaging new thinkers and individuals in search of more thought provoking development (Buckland, 2004). Anninos (2007: p307) states that such universities aim at:

- Transmitting scientifically documented knowledge through teaching;
- Advancing science through research; and
- Engaging economic development, social prosperity and progress.

It is clear from these aims that universities have not only a duty to discover truths through scientific inquiry but fundamentally contribute to society as a whole – educating the next generation of thinkers and providing in turn, any economic rewards that may come as a product of such learning (Morey, 2004). University academics are deemed to engage in three major activity streams – research, publish and teach with higher esteem awarded to research excellence (Gray, 1989).

These ideals of autonomy of scholarly learning and excellence are embedded and founded on the traditional collegial university, where such structures promote academic freedoms allowing for flexibility of debate, discussion, learning and teaching (Dopson and McNay, 2000). Such collegial approaches to the university of learning were commonplace in the

collegial Ancient Universities of “Oxbridge” where hierarchy and bureaucracy were secondary to intellectual freedoms and enquiry (Deem *et al.*, 2007; Lomas, 2004).

While the notions of the collegial university favour research orientation and dissemination of knowledge, Allies and Troquet (2004: p53) document this ‘slant’ towards research as a consequence of:

- The pursuit of knowledge as a driving force of academic activity;
- A product of the above, academic career prospects are determined by scientific outputs;
- The paradoxical effect of the opening up of universities has reinvigorated academics to focus on knowledge production.

A view reflected by the rhetoric of research as ‘of the essence’ (Gray, 1989: p127), similarly ridiculed as “flags that are flown to let someone else know that time is not being wasted but also material to make available when matters of promotion or translation arise.”

This is indicative of the demise of research orientation as a product of collegiality. The deterioration of traditional collegial freedoms and universities as organisations of learning (Morey, 2004) towards corporate orientation and for-profit education has been a product of changes in university focus and growing public scrutiny (Ackroyd and Ackroyd, 1999; Bok, 2003; Davies and Thomas, 2002). Moreover the blurring of administrative and academic lines has become more common as academics are increasingly required to undertake new management duties alongside teaching as well as occasional research activities (Gray, 1989; Henkel, 2000). Indeed Deem (2004) documents new manager-academic positions within universities with Heads of Departments (HoD) recruited from the private sector (Ackroyd *et al.*, 2007) to administer academic faculties and departments as a current trend (see chapter 2.19).

The dynamics of collegial person-centred management where individuals and peers were provided with freedoms and empowered within the decision making process is being increasingly undermined by financial and commercial attention (Buchbinder, 1993). Academic independence suffers as a result with managers and university directors

increasingly prominent in university hierarchy and structures (Birnbaum, 1988). Indeed even when members of academic staff are empowered under new management practices, seemingly precedence is given to administration and the meeting of set targets (Jarvis, 2001). This has not always been the case as Eustace (1987: p7) identifies the ideal university management as one that echoes the notions of collegiality - a composition of scholars not as individuals but as a body formulating a 'clerisy' where equality of empowered academics exists. He documents 5 criteria in order to achieve this end:

- Equality;
- Democracy;
- Self validation;
- Absence of non-scholars (to exclude scholars with non-scholarly functions such as deans);
- Autonomy from society but especially from all forms of the state.

Eustace (*ibid*) recognised that in order for university management to be ideal it has to be separate and free from external societal influences but unfortunately this dynamic can only exist theoretically. Yet still he brings to the fore the need for any collegial institution to encompass autonomy as is similarly dictated in the Royal Charters of ancient universities. This notion is supported by Buchbinder (1993: p333) who recognises not only the need to ensure scholarly integrity and focus, but that autonomy to ensure 'academic enterprise' that arises out of collegiality remains "a key ingredient in the production and transmission of social knowledge."

Yet Simkins (2000: p330) reminds us of the pressures faced by the UK education sector which include:

- The need to 'perform' in the quasi-market and take a more 'customer-focused' approach to whom they serve;
- The need to set and meet demanding targets in terms of measurable performance indicators, which are set by central government or its agents;
- The need to exhibit 'appropriate' forms of management and organisation which can be inspected and for which institutions can be held to account.

Moreover the tendency for university education and other public services is moving increasingly towards marketed goods and provisions of services valued at monetary prices differs from its traditional practices (Pollitt and Harrison, 1992).

These are indicative of the current forces that affect the orientation and management of universities within the UK. Nonetheless the current changes in the educational environment that universities operate in are not uncommon. Scholars are constantly required to safeguard their autonomous freedoms in academia but changes and alterations to the way universities are operated and governed must be reasonably accepted “we must be prepared for changes – and not only for the changes that we desire” (Truscott, 1943, cited in Eustace, 1987: p11). This is perhaps as true now as it was then as shifts in traditional management policies and practices may come as a product of new needs and political initiatives (Ferlie *et al.*, 2003; Pollitt and Harrison, 1992).

2.3 Education and its contributions

HE can have considerable beneficial effects to both its students and society at large. Perhaps it is best to use the term stakeholders (borrowed from business) to describe the eclectic mix of individuals that both benefit from and are affected by university education (Bleiklie and Kogan, 2007). The nature of HE promotes scholarly advancement and a general debating of current and historic knowledge with an aim to challenge previous conceptions (Mohrman *et al.*, 2008). This element of HE enables extension of the current body of knowledge seeking to improve mankind’s understanding on numerous disciplines and elements. Its activities are centred on imparting this knowledge and understanding to new generations to continue interest and research in the future (Bowden and Marton, 1998; Mohrman *et al.*, 2008; Jarvis, 2001).

Macfarlane (2007) views educational contributions as part of academic citizenship seeking to serve the five ‘communities’ of students, collegiality, the institution, the professional service and the public sector portraying the existence of a service pyramid. These issues highlight the notions of academic service and further indicate contrasting ideas of importance placed on different levels of the community hierarchy.

HE is also seen, conversely, as highly beneficial in its ability to contribute significantly to the financial and economic wellbeing of society and the nation (Lockett and Wright, 2005; Lomas, 2004, Naidoo, 2003). It provides learning and teaching essentially enabling individuals to gain both deeper understanding of a particular topic and perhaps vocational understanding in order to future his or her career prospects. In essence through imparting knowledge it provides individuals with the tools required to be economically viable and independent (Dearing Report, 1997; Jarvis, 2001). As such HE is a catalyst to economic rewards both to its lower level stakeholder (the student) and society at large as individuals enter the economic market. Tapper and Salter (1997: p121) emphasize this best in their review of Committee of Vice-Chancellors and Principals (CVCP) powers, “to demonstrate that expenditure upon the universities represented value-for-money, an investment which would benefit the nation’s long-term economic performance.” It could then be argued that universities are somewhat agents of the state-managed market unable to break the shackles of overt strategic control through government funding and political shifts (Tasker and Packham, 1990). Education maybe seen primarily as an “economic resource, that is driven by the economic ideology of education” (Tapper and Salter, 1997: p114) yet overall management is cryptically overseen by political pressure and reshaping. Sanderson (2001 cited in Kirkpatrick and Ackroyd, 2003: p520) further highlights the “willingness of politicians to rely on coercive mechanisms to achieve compliance with expectations.” Nonetheless the question remains, if universities are not autonomous and

free from government motives, why then the continued dwindling of the education funding pot? Notwithstanding, HE has without doubt come of age as both intellectual capital and economical investment for the future (Lomas, 2004).

In addition to this universities are important players in research. Universities undertake vast amounts of scholarly enquiry and further disseminate its findings to spur further debate and analysis. Its ability to promote scholarly collaboration and heated (but highly useful) discussion provides an arena that has beneficial elements to both society and mankind. Moreover the nature of research creates an environment where universities can benefit to and from its activities, perhaps improving the wealth and recognition of a region/area while at the same time advancing knowledge (DfES, 2003; Etzkowitz *et al.*, 2000; HM Treasury and DTI, 1998).

This is reflected in governments' grasps of the main purposes of HE (Allies and Troquet, 2004), which are to:

- Enable people to develop their capabilities and fulfil their potential, both personally and at work;
- Advance knowledge and understanding through scholarship and research;
- Contribute to an economically successful and culturally diverse nation.

Moreover Andresen (2000) and Nixon *et al.* (1998) are keen to highlight the positive association and influence research can have upon teaching quality fostering a community and environment of continuous learning.

However there have been new demands on university education and management arising from the increased need for universities to be accountable to public funds and dominant issues of intensifying external scrutiny, performance measures and assessments of quality (Buchbinder, 1993; Deem, 2006; Lomas, 2004). While HE promotes both a public and economic good it operates in an arena that is in a constant state of flux. The various stakeholders in HE and the different orientation and direction that HE can take create a complex dilemma in its management (Bleiklie and Kogan, 2007). The rising influence of business models into the organisational ideal has set new pressures on universities (*ibid*). Lockett *et al.* (2003) and Lockett and Wright (2005) discuss the growth of university

'spin-outs' as new pressures to realise and exploit its intellectual properties. Management techniques that work within the private sector's profit centred goals would only partly satisfy the diverse needs of the HE sector. An example of which would be the growth in adult and mature students as opposed to traditional enrolment of 18-24 age groups (Levine, 1997; 2001; Morey, 2004) changing the demographic groups entering HE.

Moreover the more altruistic and welfare centred approach of traditional universities are too rigid to cope with quick-shifting modern economics and complexities. Students as customer, education as a product, increased competition amidst reducing funding are the changing environmental forces that university management need to contend with alongside pleasing and meeting its stakeholders' needs (Jarvis, 2001) (see chapter 2.22 and 2.23). Its inability to satisfy these needs will only signal a relocation by its stakeholders to other more attractive organisations. Moreover political initiatives or ideas that have promoted privatisation, quasi markets and 'Third Way' reforms have added to interesting but complex permutations (Dwyer, 2004; Ferlie *et al.*, 2003; Giddens, 1998). The position that HE occupies today lies in between profitability and social contribution. To fall foul of either only creates instability, as a university must strike a balance between contending with academic integrity and seeking financial security.

2.4 Education and culture

The nature of education provides distinct difficulties in the understanding of the term culture let alone an aim to identify the potential existence of specific ideologies. Bergquist (1992) identified the need to discriminate between culture as an integral whole consisting of various elements that provide the necessary ammunition to cope, in contrast to culture that focused upon production and consumption to fulfil a need as seen in corporate organisational culture. Indeed he goes on to explain that culture can be identified as patterns of simple assumptions that provide impetus and skills needed to cope and deal with problems.

It seems likely then that organisational cultures within Bergquist's (1992) context is created and founded upon a need to remedy problems or achieve an end-goal. Indeed the cultural paradigms that exist set the scene of changes in organisational structure, hierarchy and ultimately management styles. He documents, alongside Tierney (1988;

1990) four cultural paradigms that exist in academe: the collegial culture, the managerial culture, the developmental culture and negotiating culture (see chapter 2.28).

Table 2.1 The Four Cultures of Higher Education

It is in these cultural paradigms that emanate more defined structural orientations within university management. The need to remedy and react to problems and issues that arise have perhaps led to an assimilation of new cultural ideologies that provide the tools needed to reach a resolution. De Boer *et al.* (2007) highlight these shifts to be driven by economic, ideological and pragmatic motives as the market mechanism, increased state regulation and managerialistic efficiency benchmarks created new pressures on traditional collegial culture and paradigms. This view is shared by Jarvis (2001) in identifying shifts towards corporate universities altering traditional scholarly convictions in favour of commercial and competitive orientation. Indeed Birnbaum (1988: p9) viewed the university setting as a “dualism of controls” with two inherent structures of the “conventional administrative hierarchy” and areas of ‘academic jurisdiction’ coalescing into a confused relationship. Smircich (1983: p344 cited in Birnbaum, 1988) goes further to highlight the need for culture as the ‘social and normative glue’ that ensures institutional integrity, creating “central tendencies” that “establishes an ‘envelope’ or range of possible behaviours within which the organisation usually functions” (Birnbaum, 1988: p73).

2.5 Welfarism

Traditional notions of education were built upon welfarist ideologies of social contribution and knowledge advancement. The altruistic tendencies of education provided society with a means to not only benefit in knowledge growth but with the financial and economic benefits as its product (Bowden and Marton, 1998; Kok *et al.*, 2008).

Education is seen to provide the tools required for individuals to grow and mature. Within HE welfarist tendencies tended to promote not only learning and teaching but also dissemination of research findings. The idea of education is to not only promote and invoke thought but to promote the learning process passing knowledge onto others (Jarvis, 2001). While the modern context of education is more focused on economics from the point of view of both student and the organisation, it is important for stakeholders to engage and remain supportive of furthering knowledge. The needs of students entering into HE no longer solely lies in a fascination to learn and extend his or her knowledge horizons but seeks to improve financial standing and career ambitions (HEFCE, 2007a; 2008; Jarvis, 2001). The traditional view that HE was only accessible by

the privileged has changed considerably with the advent of new government policies encouraging young adults and adults alike, from varying backgrounds, to progress into a more learned society (DfES, 2006; Osborne, 2004). This in itself can be seen as a new altruistic focus for HE, widening participation to include students from less affluent backgrounds in order for them to better contribute to society and the nation as a whole. It seems that political forces are strongly seeking to improve access and participation to ensure equality in opportunities allowing those from poorer socio-economic backgrounds to benefit from higher education (HEFCE, 2004a) as highlighted by its growing funding for widening access initiatives (HEFCE, 2004a).

Table 2.2. Changes in University Funding Amounts for Widening Participation.

The argument for such practices lies in the potential financial, economical or social benefits that a knowledgeable citizenship and skilled workforce can offer as a form of contribution to society (Lomas, 2004; Peters, 2001). Nonetheless the welfarist origins of learning to extend global knowledge and environment require some form of grounding to continue to ensure financial viability. The foundations of education need not be secondary to revenue generation, where scholarly debate and communication of knowledge remain a public good and service, yet it is without doubt that the modern economics of higher education requires consideration of the matter of funds (Buchbinder, 1993).

Peters (2001) and Solow (1994) suggest that quality education is closely linked to economic growth highlighting that education:

- Is important for successful research activities which in turn equates to growth in productivity;
- Creates human capital and knowledge accumulation.

Indeed his understanding is probably best echoed by the Lambert Review of Business-University collaborations (Lambert Review, 2003) (see chapter 2.9f) calling attention to the Government's (under Blair's Second Labour Administration) advocacy of economic growth association with educational welfare. While perhaps traditionalists frown upon the business side of academe, there is both an economic and likely social benefit gained through the practice of a more enterprise culture within HE.

2.6 Liberalism and Neo-Liberalism

With strong similarities to welfarist ideology, liberalism promotes the empowerment of the individual and strong negativity towards state control and intervention. The approach is keen to focus attention on the individual seeking to enable more autonomy and freedom in order to develop and grow (Banya, 2005).

Differing from welfarism, neo-liberalism promotes similarities of new public management focusing on quasi market and private sector goals and techniques. The increasing commerce and enterprise culture of neoliberal ideologies conflicts with the "public service ethic" (Olssen and Peters, 2005: p 324) where assumed operation to the benefit of society is secondary to new adherence to benchmarks and quotas towards increased professionalism and accountability.

The issue of welfarism differs substantially from what is seen as the neo-liberal approaches associated with HE. Perhaps a product of necessity rather than choice the changes in university management and focus stemmed from the increased need to be more open to societal needs and meeting these needs through different means (Birnbaum, 1988; Chitty, 2004; Henkel, 2000; Pollitt, 1990). The shift from education as a public good towards supporting a similar ethos but through more managed and economically sound philosophy may differ from traditional utilitarian control, yet will the end justify the means? Olssen and Peters's (2005) discussion of neo-liberalism and its 'freedom of commerce' may provide a new approach to HE management. Equally it is the authors (*ibid*) interpretation that education viewed as trade could have a negative impact.

Moreover as a product of increased globalisation neo-liberal culture (Burchell, 1996) came increased expansion of education orientation towards market forces and enterprise culture (Gleeson, 2001). Banya (2005: p147) highlights the key characteristics of liberal ideologies to include:

- Free market economics viewing the market as an efficient mechanism to create and distribute wealth;
- Laissez-faire approaches enabling self-regulation;
- Free trade;
- 'Invisible hand theory' where uncoordinated self interest of individuals is commensurate with interests and welfare of society;
- The individual as self-interested subjects with rational self-optimisation.

The difference in approaches as compared to a welfarist paradigm lies in neo-liberalism's acceptable empowerment of the state with its participation of "creating the appropriate market by providing the conditions, laws and institutions necessary for its operation" seeking to create an individual "who is an enterprising and competitive entrepreneur" (Banya, 2005: p149).

Aronwitz and Giroux (2000) similarly argue such neo-liberal rhetoric to exist in HE as changes in population demographics and demand has led to a new fee charges for access to education. This argument is supported by Banya (2005) who posits that as higher education leads to increased earnings it should be financed by those who have the most to gain.

Ultimately welfarism and its ideologies reflect more liberal management considerations, operating under softer and less authoritative approaches. It seeks knowledge generation and truth, while averring more democratic and collegial organisational structures expressing ethical virtues in its paramount bid to benefit the public. Within universities the liberal ideology entails a more public welfare focused approach to learning and research, promoting more academic empowerment and less for-profit goals. Traditional education and knowledge formation in teaching alongside less financially and remuneratively focused research takes precedence over improving cost-effectiveness and commercially viable subject areas (Olssen and Peters, 2005).

2.7 Higher education seen as a public good?

The University as a place of learning, providing education through a community of scholars, seeking common goals of knowledge dissemination, critical thought and quality research is being eroded by new focuses on market principles and commercial criteria (Bok, 2003; Harvey, 2002a; Stilwell, 2003). The welfarist notion of education as a societal good, facilitating the development and growth of society is under threat from its commoditisation into a more merchantable 'product' (Buchbinder, 1993; Carroll and Gillen, 2001; Gordon, 2003; Stilwell, 2003).

The intrinsic value of education as beneficial to society (Dearlove, 2002) is being contested by new economic incentives, financial considerations and quality assurance (Harvey, 2005; Srikanthan and Dalrymple, 2003). Universities within the UK and internationally are further placing themselves and their academic programmes into the globalised marketplace to improve student enrolments, further investing heavily in international recruitment (Baker, 2004). Such movement displays the change away from education as welfare towards education in an increasingly competitive environment with restrictions on academic independence (Dixon *et al.*, 1998; Grey *et al.*, 1996).

These new ideologies emphasising cost productiveness, promotion of saleable courses and programmes, and increased bureaucracy potentially erodes the fundamental welfarist notions of education. The conflicting polar issue of profits and education not only creates tension and issues of trust between University managers and the academic faculty (Dearlove, 1995; Stilwell, 2003; Trow, 1996), but further blurs the line between education as welfare and profit-oriented education (Chitty, 2004). Dearlove (1995: p161) reminds us "in today's world, universities cannot escape the need to adapt" but further adds "new models of management are every bit as problematic in delivering changes as are the old traditions of scholarly self-government." Similarly Birnbaum (1988: p27) remarks that "the processes, structures, and systems for accountability commonly used in business firms are not always sensible" for educational institutions.

Nonetheless the importance for education to remain impartial and a public good is pertinent. The change in precedence of education as an instrument of learning and research, towards education satisfying measurable and quantifiable benchmarks distorts the societal benefits that it brings for more current economic rewards (Grace, 1989;

Stilwell, 1998). In the long-term would the fundamental values of education and its merits be overrun by the commoditisation of academia? As Stilwell (1998: p44) argues the “root of the problems is the subordination of diverse and complex social goals to a narrow economic calculus of profit and loss.” Nonetheless whilst acknowledging the need to ensure productivity and certain amounts of profitability, the question whether education should become the output of a systematic production process remains (Farahbaksh, 2007). Perhaps a balance of management for profits (Taylor, 2003) and education for welfare (Syrett *et al.*, 1997) can be attained.

Admittedly, perhaps consumer culture may help to benefit university management and focus, creating competition and a need for continuous improvement and quality control. Moreover the accumulation and application of knowledge learned into more commercially viable constructs might provide growth to the economy and in turn socially. The nature of commercial and managerialistic education, whilst it differs from previous notions of teaching, learning and research, provides social assistance and benefit in differing ways fostering healthy competition. Yet as Peters (2001; p16) reminds us that, “the shift from industrial capitalism to information or knowledge capitalism is transforming the West into ‘workless worlds’, where only an elite technical labour force will find jobs.”

2.8 Political timeline from 1960s till today

For the purposes of this research changes within the HE sector are reviewed from the 1960s (see figure 2.2). Numerous changes within the UK HE system emanated after the Second World War as increasing numbers of students were entering universities. The increasing student uptake of HE together with the Robbins Report (1963) fuelled the development and growth in UK higher education (Chitty, 2004; Mayhew *et al.*, 2004). The HE sector not only developed to deal with growing student numbers but had to change to accommodate increasing student enrolment (Carpentier, 2006; Pollitt, 1990; Tomlinson 2005).

Continued growth within the sector led to an ever-constricting amount of funding available for the different educational institutions. This expansion in the UK HE system was partly a product of recognition by the general public that adequate education

provided a means to improve financial and career rewards (Pollitt, 1990). As the social economic wealth improved financially after the Second World War, a larger percentage of individuals were keen on furthering their education in a bid to improve their standard of living. The growth in industry was fundamental to the new need for skilled workers in turn heightening the demand for graduate labour. The sector was set to grow.

The election of a Conservative Government in the early 1970s under Edward Heath further fuelled changes to the sector as new policies to reduce public spending and the reliance of public services on government finance led to increased competition and cost-cutting measures by the sector in a bid to ensure survival and sufficient funds amidst growing student enrolments. The re-election of the Labour Party in 1974 under Harold Wilson's Third Administration created additional instability and incoherence in the sector as his administration "despite economic problems, did revert, to some extent, to an egalitarian agenda" (Tomlinson, 2005: p24) (see figure 2.2).

The establishment of polytechnics provided a means to reduce the burden on universities stretched by substantial growth in the sector. Yet changes in HE management and orientation further emanated during the 1980s under Margaret Thatcher's first Conservative Government (Deem 2006; Pollitt, 1990) where the introduction of private sector ideals of the 3Es (Dixon *et al.*, 1998; Dopson and McNay, 2000; Gordon, 2003; Trowler, 1998) of management were introduced and assimilated into public services (Kirkpatrick and Lucio, 1995; Prior, 1993). Sizer (1992) views utilisation of the ideology of the 3Es as part of the methodology aimed at justifying and accounting for use of resources (see figure 2.3). He examines the 3Es as:

- Economy in the acquisition and use of resources;
- Efficiency in the use of resources;
- Effectiveness in the achievement of institutional, departmental and individual objectives, through the successful implementations of strategies and action plans.

Moreover the government aimed at increasing selectivity of enrolments into education seeking to control and reduce comprehensive access (Tomlinson, 2005), perhaps as part of monitoring and limiting utilisation of public resources (Pollitt and Harrison, 1992). The

changes resulted in diminished autonomy and institutional freedoms seeking to centralise control of finances, curriculum and examinations. Tomlinson (2005: p40) argues “part of what became a continuing political agenda was to remove power from institutions and groups, which were bases for dissent, criticism or independent advice.”

These changes were alongside the implementation of managerialistic ideologies altering the dynamics of traditional university management towards more corporate and business minded approaches. This inevitably led to increased focus on bureaucratic and management techniques within HE in a bid to secure government funding (Chitty, 2004). Universities were forced to look at other private sources of funding seeking incomes and potential remunerative gains from enterprise and the business world (Jarvis, 2001). The growing international competition in education as a product of improving university and higher education globally further pushed UK institutions to seek around the world and attract richer students (Tomlinson, 2005).

The Jarratt Report (1985) further influenced change within the sector. It recommended that HEIs required more managerial systems of hierarchical management echoing perhaps new managerialistic culture popularised by the Conservative Government under Margaret Thatcher’s First and Second Administrations (see figure 2.2). It emphasised more administrative and bureaucratic approaches to university management moving away from traditional academic collegiality and autonomy (Jarratt Report, 1985). Perhaps a bid to ensure efficient and effective expenditure of funds, the report accentuated the need for clearer hierarchies of control and chains of authority. The late 1980s saw continued movement toward competitive tendencies as the national education system based on egalitarian structures and outcomes was increasingly being replaced with a “competitive, fragmented and divisive system,” (Tomlinson, 2005: p49) a view shared by Knight (1990) in his review of ‘politics under the Tories’ or Conservative Government. Buchbinder (1993) and Laux (1991) highlight the increased privatisation of state ownerships in a bid to spur constructive competition as part of the Thatcher Government’s First and Second Administrations.

Figure 2.2 The Political Timeline

Timeline of Governments in Power

1964 – 1966: Harold Wilson (1st Administration)

1966 – 1970: Harold Wilson (2nd Administration)

1970 – 1974: Edward Heath

1974 – 1976: Harold Wilson (3rd Administration)

1976 – 1979: Jim Callaghan

1979 – 1983: Margaret Thatcher (1st Administration)

1983 – 1987: Margaret Thatcher (2nd Administration)

1987 – 1990: Margaret Thatcher (3rd Administration)

1991 – 1992: John Major (1st Administration)

1992 – 1997: John Major (2nd Administration)

1997 – 2001: Tony Blair (1st Administration)

2001 – 2005: Tony Blair (2nd Administration)

2005 – 2008: Tony Blair (3rd Administration)

2008 – 2010: Gordon Brown

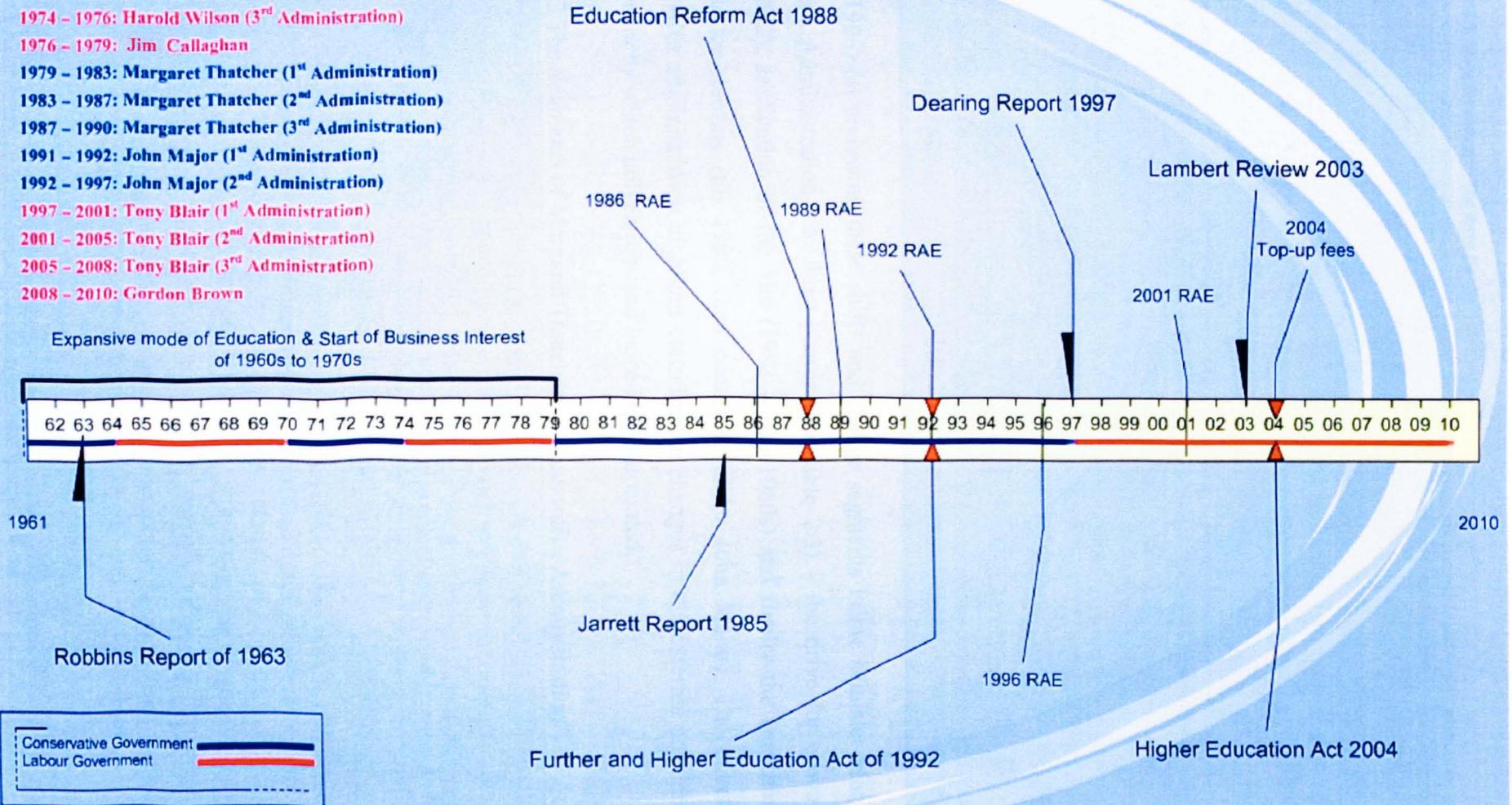


Figure 2.3 Value for money – The three Es

Pollitt (1996) on reviewing these shifts and change segments Prime Minister Margaret Thatcher's Administration into three phases (see table 2.3) – the drive for economies (1979-1982), application of the 3Es (1982 – late 1980s) and finally the launching of public sector reforms (till 1990, then continued under John Major). The effects of Conservative administration highlight considerable changes in the external and internal environment by which universities and indeed HEIs operated.

Table 2.3 The Segments of Margaret Thatcher's Conservative Administration

The early 1990s saw the end of the binary divide as polytechnics were given the right to be called universities creating a more uniform system of funding. The Education Reform Act of 1988 (ERA, 1988) and Further and Higher Education Act of 1992 (FHE, 1992) was seen by the government as a means to create a more compatible method of funding as well as management, removing the binary divide between polytechnics and universities (Morgan, 2004; Taylor, 2003). The Further and Higher Education Act (1992 para 77) deemed any institution by which,

- Power is conferred by any enactment or instrument to change the name of any educational institution or any body corporate carrying on such an institution; and
- The educational institution is within the higher education sector,

be conferred (with consent of the Privy Council) the title of university.

This approach was aimed at providing a uniform university structure whereby funding allocation could be effectively undertaken alongside a more manageable structure of management (Chitty, 2004; Henkel, 2000) as funding councils were to be unified (see chapter 2.12). This was in contrast to the separate funding allocations of the Universities Funding Council and The Polytechnics and Colleges Funding Council (FHE para 62, 1992; Tomlinson, 2005). Patterson (1999: p15) views this mode of integration as ‘the metamorphic model’ where “a virtual stroke-of-the-pen transformation of the polytechnics into universities” took place.

The end of the binary divide provided a means for simplification and equality in funding regimes aiming to create flexibility and adequate supply to counteract the rapid growth in the sector. Yet as Tomlinson (2005) argues the period following the enacting of the Acts was filled with chaos or instability within the sector. Moreover, the perceived goodwill of increased research capable institutions was overshadowed by increased competition for research funding and disparities in institutional capacities (Chitty, 2004; Morgan, 2004; Tomlinson, 2005). Yet Patterson (1999) is keen to reinforce that in some cases former polytechnics were well into several stages of institutional development.

The period to 1997 continued with increasing emphasis on improving the quality of education and the creation of national benchmarks as institutions were introduced to quality control measures. Moreover this environment of changing autonomy and freedoms in HE continued under *New Labour* in 1997 (Tomlinson, 2001), when Prime Minister Tony Blair's first Labour Administration implemented a number of recommendations highlighted by the Dearing Report (1997) (Trow, 1998). The report highlighted considerable benefits towards students and graduates post higher education, recommending that it would be fitting for students to contribute in exchange for such advantage (Dearing, 1997; Greenaway and Haynes, 2003; HEFCE, 2008; Sutherland, 2008). The move was sparked partly by the need to find new sources of funding for higher education as student numbers increased amidst reducing government spending as the Teaching and Higher Education Act (1998) abolished maintenance grants and introduced a prescribed amount of £1000 as fees (Tomlinson, 2004). Lord Dearing's report did further recognise that "higher education embraces teaching, learning, scholarship and research" (Dearing 1997, para 1) and increased funding was required to support and bolster this trend.

This saw a shift in policies as students were for the first time likely to be charged tuition fees. These policies not only established tuition and later variable fees (Chitty, 2004; Pennell and West, 2005) but further led to the increased commercial and 'market' orientation of universities as competition for student numbers, research funding and corporate-like goals became more widespread (Morley and Rassool, 2000; Sutherland, 2008). Gewirtz (2002) adds that under Labour's first term between 1997-2001, HE saw the intensification of managerialism and its ideologies practiced within the education system.

Nonetheless the Labour Government sought to remove selectivity and improve participation in higher education as "key to a successful economy was knowledge and education" (Tomlinson, 2005: p90) and the ability to "respond to a competitive global economy by improving the skills and qualifications of young people" (Levin, 1998 cited in Tomlinson, 2005). New widening participation initiatives further compounded the increase in student numbers as the government set new targets for entry in higher education by less privileged and more deprived communities (Gewirtz, 2002, DfES, 2006). While enabling a socially sound contribution it unwittingly created new

competition in the sector as universities sought to increase enrolments to ensure steady and sufficient amounts of government funding (Greenaway and Haynes, 2003). This, nonetheless, resolves issues of access to education as government policies on widening participation, removing selection and improving accountability and quality in HE (Chitty, 2004; DfES, 2006; Hendry and Dean, 2002; Lee, 2005; Shattock, 2006) provided additional benefits to society as a whole. Similar importance was placed upon retention rates by which funding allocations were considered (Rowley, 2003).

Whilst these implementations improved university funding and access to education it created new complexities which universities had to contend with. No longer were universities solely involved with the activities of education, learning and research but with these new political forces they were required to acquire business management skills (Pollitt, 1996; Tomlinson, 2001). Public institutions such as universities were increasingly forced to cater to “market forces, competition and privatisation, which resulted in more educational, social and economic inequalities” (Tomlinson, 2005: p134). The growing trend was focused upon the main issue of cost, with less democracy, less collegiality and increased centralisation (Buchbinder, 1993). The HE sector was increasingly being remodelled into institutional hierarchies, as disparity in research quality and the attraction of wealthier students grew more obvious (Tomlinson, 2005).

The Higher Education Act of 2004 (HEA, 2004) confirmed increased tuition or top-up fee costs to students entering higher education. Universities were able to charge up to £3000 of variable tuition fees to incoming students creating additional funding for the sector alongside new fears of diminishing student enrolments (Cassidy, 2006; Pennell and West, 2005). Even with additional monies, these changes came at a cost to the quality of education as increased focus on meeting government targets for student numbers and promotion of research recognition took precedence, obscuring the cardinal goals of education (Bok, 2003; Stilwell, 2003). Yet Tomlinson (2005) still highlights that government spending under *New Labour's* manifesto of ‘Education, education, education’ (Labour Party Manifesto, 1997; Lawton, 2004; Tight, 1998) saw limited and at times lower levels of funding allocations.

The political turbulence of changing government administration has inevitably been catalyst in the transformation of HE as an elitist, collegial approach towards more

corporate and business-orientated connotations. Yet it is also without doubt that many educators today still value education as society's right, but amidst calls for increased pay (BBC News, 2006; Blair, 2006b; Halpin, 2006), students as customers (Denman, 2005; Liu and Dubinsky, 2000; West, 2006; Winston, 1999) and the ethos of education as a product (Stilwell, 2003), it is increasingly difficult not to see education as more of a commodity within today's marketplace. Changes in the ideology of education as a public good as a fundamental tenet of a welfarist society and the welfare state is likely as amidst decreasing government funding the push and allure of profitability in the modern globalised world seems to be more prominent (Buchbinder, 1993; Gibbons, 2005; Srikanthan and Dalrymple, 2003).

2.9 Major Government Reports since the 1960s

2.9a Robbins Report 1963

The Robbins Committee of 1963, and subsequent report chaired by Lord Robbins, highlighted the need for rapid expansion in higher education as new necessity within industry for a skilled workforce grew out of new labour-force demands post wartime. The growth in the sector was in part a recognition of many nations after the Second World War for the potential and need for a more expansive education system for all individuals (Dearlove, 2002; Sutherland, 2008). This coincided with awareness and appreciation of the economic benefits that could be gained from a knowledgeable workforce (Tomlinson, 2005). The Report "rejected the prevailing notion that there was a limited pool of ability and recommended the expansion of education" (Tomlinson, 2005: p19). Previous notions of exclusivity to the affluent or upper classes were dispelled with more socially inclusive policies to the sector. As a product of the report, shifts in the distribution of university academics along the different university types amplified as faculty staff spread across growing universities in the expanded sector (Halsey, 1979).

This inevitably increased pressure on the then older universities to satisfy the growth and enlarging of student numbers and required new universities or institutions to balance the supply and demand for HE. The existing universities did not have sufficient capacity to cater for the expanding numbers entering into HE (Dearlove, 2002). Halsey (1979: p406) views the report as crucial in the growth of numbers and "the invention of a separate form of higher education in polytechnics."

Many of the plate glass universities (discussed in more detail in 2.27c) were established during this time and operated alongside the existing ancient and redbrick universities and colleges of further education. Nonetheless it is also important to note that the establishment of said universities was decided before the report was published (Wagner, 1998) (see chapter 2.27 for more details).

Dearlove (2002) and Mayhew *et al.* (2004) highlight the report as a shifting point at which HE moved away from an elite system to that of mass education as a result of environmental pressures.

2.9b Jarrett Report 1985

The Committee chaired by Sir Alex Jarratt was charged with reviewing and identifying potential methods by which HEIs could enhance overall efficiency through improved management (Jarratt Report, 1985; Jones, 1991; Shattock, 2002). Considering universities as corporate entities it recommended more diverse governing members to include laypersons (Pollitt, 1990). Recognising the limited available funds for universities, the report further highlighted, while accepting of scholarly autonomy, a need for corporate governance and “strategic academic and financial planning” (Dearlove, 2002: p260)

The report has been criticised for not identifying with the ideological and intrinsic scope of university education, but instead was overly focused on promoting efficiency gains, promoting more corporate and business-like management hierarchies (Dearlove, 1995; 1998; 2002). It recommended a shift from traditional Senate and Council governing of “executive governing body responsible for control of resources... and a sovereign academic authority” to other more inclusive orientations (Dearlove, 1998: p66). Reflective of these changes, the report further advises title shifts of vice-chancellors into chief executives and increased delegation to full-time administrators (Dearlove, 1995; 1998; Shattock, 2002; Tapper and Palfreyman, 1998). Duke (1992: p11) further highlights the recommendations for tighter and more managerial methods that enable “faster, more efficient systems for taking decisions, monitoring results and acting to rectify deficiencies.” Moreover additional payments were only made to staff members that were “deemed particularly valuable, either because of their productivity or because of their

scarce market-value” (*ibid*).

Ultimately the Committee reinforced many assumptions of increasing corporate views of university operations and the need for business-like techniques, ideologies and management to bolster the administrative trend and authority through the growth of performance indicators (Jones, 1991; Sizer, 1992). The Committee further pushed forth usage of performance measures as assessments of accountability alongside its recommendations to empower singular individuals with both managerial and academic leadership (Sizer, 1992). It supported changes in the traditional management of universities, suggesting fewer committees and challenging established university-wide participation and discourse in favour of small and powerful committees that would plan and manage resources (Jones, 1991) - effectively moving away from collegiality (Dearlove, 1998).

2.9c Education Reform Act 1988

The Education Reform Act (ERA, 1988) effectively set in motion changes to the binary system of HE within the UK. It established separate funding councils for polytechnics and university with polytechnics no longer under local education authority controls. Bargh *et al.* (1996) and Dearlove (2002) document this freedom from local authorities as polytechnics and colleges were transformed into higher education corporations with legislations prescribing membership of its Board of Governors. The Act further clearly defined the powers of higher education corporations and the designation of what constitutes as institutions of higher education (polytechnics) (ERA, 1988: para 123; 129).

2.9d Further and Higher Education Act 1992

The Further and Higher Education Act of 1992 effectively established the new universities from their title as former polytechnics (Tapper and Palfreyman, 1998). The move was aimed at improving the overall management of the sector and to create a uniform system of funding and fair competition. In essence, in a bid to improve the overall productivity of the sector and create an even field for research and government funding, the Act aimed to remove the existing binary divide creating a generic and thus level playing field for all HE institutions. Yet academics have questioned its rhetoric as

being “designation as university” is quite opposed from being “recognised” as one (Tapper and Palfreyman, 1998).

The Act unified previous funding councils into the Higher Education Funding Councils for England and Wales

2.9e Dearing Report 1997

The Dearing Committee of 1997 chaired by Sir Ron Dearing and subsequent report, highlighted numerous changes required of the British HE system putting into motion the introduction of tuition fees. The report called for increased input (in monetary terms) by students entering into HE who were to gain from further and higher levels of education (Dearing Report, 1997; Osborne, 2004; Shattock, 1998). The ideology emphasised by the report and in part the government’s approach to ‘no rights without responsibilities’ indicates the need for a return input by students who stand to benefit from HE (Gewirtz, 2002; Labour Manifesto, 2001; Lawton, 2004). Greenway and Haynes (2003), HEFCE (2008) and Wagner (2008) highlight this marked improvement of salaries and job opportunities of graduates portraying the potentially remunerative gains of students entering and completing degree education.

Moreover this report, implemented by the incoming Labour Government of 1997 under Blair’s First Labour Administration (see figure 2.2), was seen as a catalyst to the increasing commercial and competitive focus of universities seeking increased student numbers to ensure continued funding (Shattock, 1998). While the application of tuition fee recommendations were implemented, Wagner (1998) highlights a distinctly different approach and tact by the government in its execution of methods disparate from the report - the creation of 100 percent student loans and means-tested allocation of tuition contributions rather than 50/50 percent grant/loan mix and 100 percent of tuition contributions.

It further set in motion increased expansion of the sector, citing new needs for vocational training and HE to satisfy the growing labour market (Dearing Report, 1997). The report was instrumental in its recommendations for increased quality control and audit of the sector seeking the scene for “a more equitable system of financing” (Wagner, 1998: p75)

However Dearlove (2002) and Shattock (1998; 2002) highlight the reports effects on university governance (seeking to streamline the Councils of traditional universities and the growth of performance indicators) as measures of institutional effectiveness and compliance to government targets. This is alongside the distancing of academic authority within university decision-making against growing emphasis on management and benchmarking of teaching and research (Dearlove, 2002).

Shattock (1998: p42) reflects this perspective and recognises the report's 'corporatist' model drawn from the "world of business and commerce" with an "analogy [that] simply does not fit." He goes on to indicate the report's lack of understanding of the strengths and weaknesses of traditional university governance, and offers no evidence that its recommendations would remedy pressures within the sector (*ibid*).

2.9f Lambert Review of Business-University Collaboration 2003

The Review and subsequent report was very much seen as a business review of university operations and highlighted key areas for development (Lambert Review, 2003). It provided the government with recommendations on how universities could improve productivity and overall financial wellbeing through better interactions and working together with private companies (Shattock, 2004). The report further discussed the potential approaches and methodologies that could be undertaken to forge a more vocationally sound graduate workforce and research and knowledge transfer that would rival international institutions (Lambert Review, 2003). Buckland (2004: p252) indicates these approaches to stem from 'modernising' agendas drawing ideas from "company model[s] of a 'board' solution to external governance problems."

Identifying weaknesses and potential remedies to current funding mechanisms the report addressed many economically centred issues with appropriate implementation leading to both internal university financial gain and that to the region and nation as a whole (Lambert Review, 2003). It highlighted key changes that were to be effected in the HE system, identified shortcomings in the lack of collaborations and relationships between business and universities, and indicated several key areas for government review and potential policy implementation (Buckland, 2004; Shattock, 2004).

The report identified a need for more demands from business and enterprise for research from universities rather than vice-versa and sought to improve knowledge transfer and intellectual property into the economy (Lambert Review, 2003; Lockett and Wright, 2005). Yet Buckland (2004) reminds that the review analysed the deficient demands for research by business and sought to enhance business performance rather than aimed to improve and stimulate university management.

The need for regional improvement and development was another issue highlighted by the report as it called for universities to become more proactive in improving the social and economic wellbeing of its geographic region (Lambert Review, 2003). The review also indicated the current difficulties in terms of funding mechanisms and suggested a review or shift in dual streams of funding into a more realistic approach (*ibid*). The current system, although aspiring universities to meet national benchmarks, had outstretched smaller institutions that had to compete generically with other larger institutions (Shattock, 2004). Buckland (2004) and Shattock (2004) highlight this disparity to lie strongly with disparities between governance, management structures and institutional design of pre-1992 and post-1992 universities, which inherently provide different capacities from varying institutions.

This is perhaps an issue of the current management of universities with rigid and traditional management styles that at times do not interact well with the profit-centred and decisive decision making that takes place in the private sector. Shattock (2004) highlights the reports similarity to the Dearing recommendations in its bid to alter university governance with prominence given to managers.

The report further advocated a closer working relationship with businesses to identify key and important skills required for the next generation of graduates entering the labour market, alongside stronger executive management (Shattock, 2004).

2.9g Higher Education Act 2004

The Higher Education Act of 2004 (HEA, 2004) established the introduction of variable top-up fees where universities were essentially able to charge up to £3000 in undergraduate student fees. As part of this change universities were required to submit

their fee plans for assessment to the Director of Fair Access (a post enacted by the Act) to ensure equality opportunities and continued widening participation.

Other actions within the Act include the establishment of a new Arts and Humanities Research Council and a new scheme for reviewing student complaints.

2.10 Politics and structure.

Undeniably changes in political parties and changes in political directives have had a considerable effect on university management. Traditional elitist higher education can no longer cater for the widening entry of students from other demographic and less economically equipped individuals. The drive from policy to improve participation rates not only benefits society and the region but also the UK economy as a whole as individuals contribute to the economy as skilled workers towards the creation of a knowledge economy (as highlighted in chapter 2.8).

Indeed left and right politics over the last few decades have altered HE into a system that meets the measure of performance indicators and quality benchmarks and away from 'ivory towers' and 'closed doors'. The role of the university, while a public and in essence a non-profit organisation is being reshaped into institutions that are publicly accountable with elements of profitability considered (Tapper and Palfreyman, 1998). This new paradigm shift and orientation requires new structures and management that can not only cope with the new needs within HE but that can foster change and react to both the needs of government and still balance its books. A view that Gray (1989: p124) agrees as governmental monetary pressures foster "simplistic authoritarian managerial approach of many vice-chancellors and their most senior colleagues to shake the bones of the institution with ruthless determination to make something happen... so long as costs were significantly cut."

The traditional collegial structure created in ancient universities may hold rigid to such change but are able to mainly as a product of research prestige and excellence. The newer and younger universities would inevitably have to cater and capitulate to the modern trends of financial management, increased bureaucracy and overall transformation of management geared towards resisting the negative forces of the education market

(Henkel, 2000). Yet their intrinsic background as vocational and technological colleges provide considerable management structures that are already in place and suited to such orientation (Gray, 1989; Henkel, 2000; Tapper and Palfreyman, 1998) (detailed discussion in chapter 2.25). Nonetheless Tapper and Palfreyman (1998) warn that collegial structures are in retreat as a product of more dominant internal and external forces play a role in shaping management within universities existing only within particular layers or segments of institutions.

It is without doubt that the changes in the political environment since the 1960s have affected the management of universities. The changing demographics of students within HE and the transforming demands of modern economies requires restructuring and realignment to these new focuses (Henkel, 2000; Tapper and Palfreyman, 1998). The eclectic nature of universities and their management structures highlight a strong diversity within the sector, which are at times rigid to change and political pressures. Orthodox and conformist styles may not cope well with education today. While it is indeed ideological that academic sanctity should be free from political bias and influence in the search for truth, the mechanisms linked with political authorities can and do shape the environment within which HE operates.

2.11 Historic approaches to university funding

Dearlove (1998) in his examination of funding and resulting management changes details traditional university funding to come from private sources till the early 1900s with the establishment of the University Grants Committee (UGC), which as Shattock (2008) explains consisted of academics that worked closely with different branches of government departments and other committees to allocate funds based upon the needs of the university and the country. A view further reflected by Eustace (1982: p284) who states “the great majority of the members of the Committee have always been scholars in good standing; and the chairmen have always been university scholars though generally with administrative experience.” Yet this centralisation of funding into the UGC saw university funding managed by government and the institutions themselves increasingly dependent on state monies (Gray, 1989). These funds came in the form of ‘block grants’ where individual institutions were free to redistribute and allocate resources determining “their own pattern of development... against internal transparency and external

accountability...” (Dearlove, 1998: p64). The system known as the “quinquennium” awarded funds to universities every five years and provided sufficient scope for autonomy as institutions were not only able to exercise their own discretion with the usage of funds but did not have to account for its utilisation at the end of the period (Eustace, 1982).

Since the end of the Second World War, there has been considerable growth in the education sector (Bleiklie, 2003). The Robbins Report (1963) identified the need for expansion of the HE sector in order for university operations to cope with the growing number of enrolling and potential students and moreover initiated the shift away from UGC under Treasury control towards management under the Department of Education and Science (DES) (Eustace, 1982; Tapper and Salter, 1995).

Further changes in HE funding stemmed from shifts in governmental politics during the late 1970s. The election of Margaret Thatcher as Prime Minister in 1979 led to considerable changes to funding within the public services and HE, introducing more stringent measures of funding alongside tighter financial control (Deem, 2006; Pollitt, 1990). This differed from Conservative promises of level funding instead imposing cuts of 15% to university allocated monies and a bid to reduce student numbers by 10% (Eustace, 1982). The reduction in public funds alongside increasing student numbers and competition created an environment of change and restructuring within HE (Carpentier, 2006; Morley and Rassool, 2000). Universities were required to seek alternative methods of funding (either through their own operations, donations or private enterprises), setting the scene for the assimilation of increased managerialistic and bureaucratic considerations in HE management, reducing traditional academic autonomy and freedoms in favour of financial prudence (Chitty, 2004; Henkel, 2000; Shattock, 2006).

This along with the establishment of more quality control benchmarks together with student enrolment quotas and pass rates led to increased competition within the sector, requiring more administrative sound usage of funds. Changes brought about by the Education Reform Act (1988) and subsequently the Further and Higher Education Act (1992) (as discussed in chapter 2.9d) saw the end of the University Grants Committee (UGC) in favour of the Universities Funding Council (UFC) and Polytechnics and Colleges Funding Council (PCFC), all of which ultimately gave way to the Higher

Education Funding Councils at the end of the binary divide (Taylor, 2003; Williams, 1992).

The FHE (1992) was aimed at amalgamating the two systems of polytechnics and universities into one singular and thus more manageable system of control and funding (Chitty, 2004; Henkel, 2000). The end of the binary divide, while in essence sought to simplify funding mechanisms and approach, led to widespread inequality and at times was met with strong negativity (Taylor, 2003). The unified system of HE meant that both traditional universities and former polytechnics were competing for similar 'customers' while providing not dissimilar programmes of study (Bleiklie, 2003). In addition to this, the unified system brought about increased research competition as the number of research-able and active institutions grew. Nonetheless a significant proportion of RAE monies and research grants still funded older more research-oriented universities (Lomas, 2004; Morgan, 2004).

The reduction in funds amidst an enlargement of the student population meant that universities were stretched financially (Greenaway and Haynes, 2003). The public pool of funds was considerably limited. Moreover research grants and funding were rigorously contested by a large majority of both traditional and new universities. The creation of the RAE in a bid to improve research quality through competitive measures as universities sought to achieve high research scores may have heightened the calibre of research dissemination but did not resolve the problem (Tapper and Palfreyman, 1998). Although the RAE has contributed to enlarging emphasis on research quality, expertise and recognition with an aim that the monies received can be channelled into university operations, universities without the capacity to compete found themselves falling behind the older and larger research centred institutions (Bleiklie, 2003; Morgan, 2004; Page, 2004; Shattock, 1998). Similarly Salter and Tapper (2002: p252) highlight significant realignment of "internal governance arrangements" to enable institutions to adequately compete for RAE funds in a "highly labour-intensive game characterised by increasingly detailed and sophisticated rules."

Literature in the area (Bok, 2003; Harvey, 2002; Stilwell, 2003) questions the merits of research undertaken to attain funding. Traditionally research linked to prejudicial funding sources questions its ethics, yet research to improve and attain considerably larger

government funding is less frowned upon. Lomas (2004) identifies that research was the major activity within the ancient universities of Oxbridge and many red brick universities, partly as it was viewed as a major resource stream (typology discussed in chapter 2.26). Political shifts led to further changes in the funding regime, most notably the introduction of the HEFC throughout the UK. Universities within England and Wales were funded under the HEFCE while Scotland and Northern Ireland had their own counterparts (see table 2.5). The movement towards HEFCE funded control essentially devolved autonomous, government-agenda-free funding mechanisms. Instead what was previous council distance from politics increasingly moved towards more intense review by government (Sizer, 1992). Many have voiced a keen dislike for HEFCE's seemingly government linked agenda in its ability and decisions to antagonise academics through more restrictive funding measures (Dearlove, 1995; Shattock, 2008; Trow, 1996). Altering funding calculations and measures that more actively meet government and political agendas highlights the reducing freedoms within university management and setting as new benchmarks and targets need to be achieved in order to receive adequate funds (Kok *et al.*, 2008). This is echoed by Sandbach and Thomas (2000: p61) as changes in UGC policy led to calculations of funding based upon teaching and research components, 'breaking' the "historic pattern of funding." This shift required reassurance by the UGC (now defunct) that funding still remained as block grants with institutions free to allocate the funds internally.

HEFCE funding was calculated on a number of measures, mainly dealing in student numbers, enrolment and retention. A plethora of literature argues that these measures tallied with the government agenda on widening participation (HEFCE earmarks funding allocations for this (HEFCE, 2004a; 2005; 2006; 2007a; 2008)), which aimed to improve participation by lower social groups into HE, circumvents institutional and academic autonomy for politically linked control (Gordon, 1999; Grace, 1989; Shattock, 2008; Stilwell, 1998). Unfortunately this approach, while satisfying both the funding needs of universities and the political agendas of government, creates an avenue for less interested and capable students slipping into university education. Moreover overemphasis of degree classifications as true indicators of distinction could highlight a significant diminishing quality of university education, focusing instead on the quality of teaching and learning as a product or currency of honours classifications (Elton, 2004; Turnbull *et al.*, 2008; Yorke *et al.*, 2008). Current worries on the quality and ease scoring high 'A' level results for

university entrances highlights the grass root dilemmas in widening participation (Gunn and Hill, 2008). While there is an inevitable debate on scholarly conduct and excellence, promoting equal and more diverse access into university education does align well with altruist tendencies of HE and learning (Anninos, 2007; Clarke *et al.*, 2000). Conversely Tapper and Palfreyman (1998: p153) argue that political forces within government have not pressured universities to align with politically fuelled agendas and pathways but have rather sped up the “inexorable social and academic developments that were already being driven by society.”

Under Prime Minister Tony Blair’s First Labour Administration the implementation of the Dearing Report (1997) recommendations brought new changes that were further required of universities. One of the report’s recommendations was for students to contribute financially to their education via tuition fees as their payment for improved career opportunities and income. The introduction of tuition fees in the early millennium sought to create additional funding within the HE sector (see Wagner, 1998). Applying the recommendations of the Dearing Report (1997), tuition fees in the amount of £1750 were effectively being charged to students as a means to provide funding to the sector – a rights with responsibilities approach or ‘Third Way’ by the Labour government (Dwyer, 2004; Gewirtz, 2002; Labour Party Manifesto, 2001; Lawton, 2004).

This shift in access to education was further altered with the introduction of variable top-up fees through the Higher Education Act of 2004. 2003/2004 saw the introduction of variable top-up fees, where universities were free to charge students tuition fees up to the value of £3000 (Deem, 2006; HEA, 2004). These new policies were set in place to ensure continued adequate funding for HE through a contribution by students who themselves would benefit from higher learning, yet created doubts in future student enrolment volume (Blair, 2006a; Cassidy, 2006) and potential negative effects on widening participation (Osborne, 2004).

2.12 Funding in the UK

HE and university funding in the UK is provided from two main resource streams – the government and private funding. Within governmental funding four UK funding bodies are charged with annual allocation and distribution of funds to the nations of England,

Scotland, Northern Ireland and Wales. They include the Higher Education Funding Council for England (HEFCE), the Scottish Higher Education Funding Council (SHEFC), the Department of Employment and Learning (DEL) and Higher Education Funding Council for Wales (HEFCW) respectively (see table 2.5).

These bodies distribute funds through a funding formula for teaching and research that is based upon student numbers, subjects taught, research quality and volume (see Appendix 1 for more details). Consultation with governmental bodies such as the Department for Education and Skills (DfES), the Quality Assurance Agency (QAA) and Higher Education Statistics Agency (HESA) is undertaken before allocation of funds. The approach (HEFCE, 2006: p4) aims to ensure that there is:

- Opportunities for students from all types of backgrounds to benefit from HE
- Maintain and enhance the quality of teaching and research
- Encourage universities and colleges to work with business and the community
- Support diversity
- Encourage efficiency in the use of public funding
- Provide stability in funding from year to year.

Private funding for universities comes from non-governmental sources to include private research income, fee-paying students and other activities.

Figure 2.4 Sources of University Income in 2001-2002

Indeed levels of funding have risen over the period 2003-2008, with monies allocated to different university initiatives (see table 2.4).

Table 2.4 Changes in University Funding Amounts

2.12a Research funding and income

Research funding is strongly based upon volume of research output alongside indicators of research quality. These assessments are undertaken through the Research Assessment Exercise (RAE) which grades university research output and income based on international and national excellence (HEFCE, 2004a). These ratings provide an indicator and measure to determine allocation of research funding by the research councils (see Appendix 1 for more details). Where funds utilised for university infrastructure are managed by the education funding councils, the research councils provide research specific funds (see table 2.5). The approach sought to distinguish funding for teaching and research into two separate streams will separate calculations for allocation of monies (Chiang, 2004).

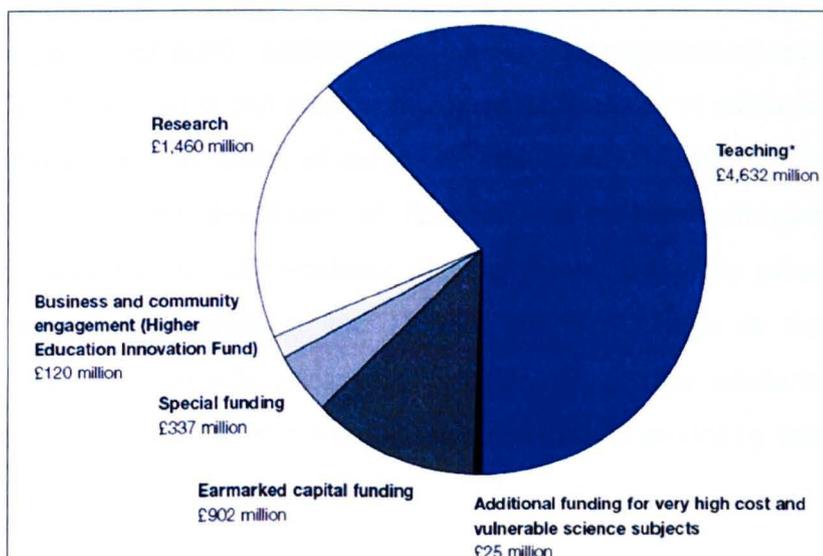
Funding from the research councils comes in the form of grants and contracts, which are applied for by university academics. These are examined on a case-by-case basis and are utilised in the pursuit of specific and particular lines of research. Nonetheless such approaches have not been accepted without particular obligations, as Becher and Kogan (1992: p60 quoted in Chiang, 2004: p196) explain of increased selectivity and growing “determination to plan, through stratification, and to demand accountability.” This commitment extends into changes from previous grant letters to financial memorandums revealing contractual government-university relationships (Chiang, 2004).

The majority of UK research income comes from the research councils and funding bodies but include monies from other private non-governmental sources. Figure 2.5 provides a representation of sources of university income and funds.

Table 2.5 UK Funding and Research Councils

Higher Education Funding Councils	Higher Education Research Councils
<ul style="list-style-type: none"> • Higher Education Funding Council for England (HEFCE) • Scottish Higher Education Funding Council (SHEFC) • Department of Employment and Learning (DEL) • Higher Education Funding Council for Wales (HEFCW) 	<ul style="list-style-type: none"> • Biotechnology and Biological Sciences Research Council (BBSRC) • Engineering and Physical Sciences Research Council (EPSRC) • Economic and Social Research Council (ESRC) • Medical Research Council (MRC) • Natural Environment Research Council (NERC) • Particle Physics and Astronomy Research Council (PPARC) • Council for the Central Laboratory of the Research Councils (CCLRC)

Figure 2.5 Breakdown of HEFCE funding available for 2008-09: Total £7,476 million.



2.13 Funding and higher education management

While the application of new mechanisms to improve funding to the sector provided additional monies for university operations, its application has contributed to the changing face of HE management and organisational culture (Davies and Thomas, 2002; Dearlove, 2002). The approach of HEFC has created disparity and inequality in funding allocations as traditional research centred universities increasingly benefited from RAE funding while newer universities were unable to compete effectively (Bleiklie, 2003; Page, 2004; Shattock, 1998). New universities were more suited to activities related to teaching and learning and thus fell significantly behind in research ratings and league table calculations, potentially leading to additional dissimilarities as potential students favour universities further up the ranking (Gunn and Hill, 2008).

These changes in funding structure have affected organisational culture by creating a shift away from the conventional core of HE towards more quantifiable goals and objectives (Birnbaum, 1988) than meet the benchmarking needs of accountability to public funds (Becher and Kogan, 1992; Trow, 1996). Sandbach and Thomas (2000) have highlighted shifts and devolution of budget centres as recommended by the Jarrett Report (2003) to ensure better adherence to financial constraints and funding allocations. The approach perhaps devolves power from academics towards budget and financial managers creating more sophisticated models of management and hierarchy (Sandbach and Thomas, 2000). Moreover the growth of public performance indicators as measures of accountability for funding bodies, governments and society, of appropriated usage of public funds highlight the new market orientation model of university management (Sizer, 1992). The shift in organisational power and devolution of financial and perhaps administrative control generates new dilemmas of micro-politics, altering current university priorities and with its institutional culture (Sandbach and Thomas, 2000). Changes in the autonomous management regimes alongside the urge of scholars to produce scholarly research (as before) as major elements within universities are increasingly eroded by being forced into more commercial attitudes (Eustace, 1982).

Moreover the competition for funding has altered traditional academic mindsets of undertaking good research in favour of research that equates to increased funding and are economically beneficial to the university (Bleiklie, 2003). The dilemmas involved with

seeking stable government funding have compelled universities to become more business savvy, fostering new partnerships with private enterprises and international organisations (Buchbinder, 1993; Gibbons, 2005; Lambert Review, 2003; Shattock, 2004). Indeed the adoption of patents regarded as part of quality research indicators highlights further this movement away from conventional academic orientation in a bid to secure funding as a product of intellectual property endeavours (Etzkowitz *et al.*, 2000).

The 'stranglehold' of government funding and the obligations that follow alter the dynamics of traditional HE management, favouring governance that manages rather than allows for academic autonomy and knowledge discourse (Shattock, 2008). The shifts in government politics together with funding calculations and mechanisms promote university management compliance to government policies and agendas in order to meet benchmark levels for funds. Etzkowitz *et al.* (2000: p319) document that public funding of research within the UK is dependent on "whether it will make a direct contribution to the economy." Yet the application of quality assurance benchmarks and performance indicators set by government agencies (such as QAA, HEFCE) are aimed at improving transparency (Jackson, 1997) and seek to "make more explicit the operation and outputs of the UK higher education sector" (Turnbull *et al.*, 2008: p17) rather than solely aimed at aligning university orientations with political initiatives. Nonetheless Eustace (1982) recognises the ease at which the State could utilise the research councils as an administratively simple to use, powerful weapon to alter the balance and decide on priorities. A perspective that advocates Dearlove's (1998: p64) interpretation, as universities were increasingly "squeezed financially and made more accountable for their expenditure of public money." This, in tune with new quality control measures, required universities to become more effective and efficient with diminishing levels of funding promoting a shift towards mass education (Morey, 2004; Turnbull *et al.*, 2008). The Jarrett Committee and its report bolster this impression in its advice that universities can best improve efficiency and effectiveness through adequate planning and usage of resources (Dearlove, 1998). Although suggesting that quality assurance applications can improve overall university delivery and the 3Es, thereby ensuring effective usage of funds, Lomas (2004) recognises that inevitably there is some form of 'opportunity costs' that arise with resources allocated to one method precluding usage of the other. Sizer (1992: p158) highlights concerns that excessive emphasis on cost efficiency in the short-term would be at the expense of more long-term effectiveness in university operations,

potentially losing sight of what is actually required – “you can be inefficiently effective, but not efficiently ineffective.” Moreover with new focuses on achieving better funding (through industry, government and the generation of income) universities have been pressured to become more involved with entrepreneurial culture and the exploitation of research for commercial gains (Etzkowitz *et al.*, 2000; Lockett *et al.*, 2003).

Nonetheless Lomas (2004: p157) reminds that the application of quality assurance measures in itself sets new dilemmas that need to be considered, as “some outputs of higher education are more easily measured than others” and reflects more managerialism aligned methodologies. Lomas (2004) and Yorke (1996) argue that there is increased focus today on quality enhancement rather than assurance, seeking to improve through transformative techniques the current methods of teaching and learning, instead of preventing product or service issues as prompted by quality assurance. As such research quality and quantity of outputs as performance measures by which to allocated research monies creates new dilemmas. Davies *et al.* (2007) highlight the difficulties that arise in the implementation of measures of Total Quality Management (TQM) within incompatible university cultures. The theories behind TQM, or even Critical Success Factors (CSF) may play a more sizeable role in education management, but the question of applicability still lingers (Kanji and Tambi, 1999). Moreover the drive by universities towards seeking more substantial research related funding mechanisms could be at the expense of teaching (Sizer, 1992), which is a fundamental university activity. Similarly Sizer (*ibid*) notes the difficulties in assessing quality in teaching and the development of performance indicators as measures of this. However Eustace (1982) argues that even under the UGC, there always existed an expectation for universities to undertake research as part of funding allowances.

Chiang (2004: p195) highlights a significant deterioration of both academic and university-wide autonomy as a product of diminishing funding – “funding gradually became a powerful tool available to the English government for steering the system and influencing institutional behaviour.” With funding increasingly linked with research output and the meeting of quality benchmarks accountability to public funds is becoming increasingly strong and formal, with government keen to retain some control over the shape of higher education (Robertson, 1998). The changes in funding based on political directives have inevitably reduced traditional management autonomy and freedoms.

While the promotion of quality learning and research with freedoms for scholars to exercise some amount of personal discretion and option remains, these are increasingly based upon budgetary constraints and forecasted potential financial returns. Chiang (2004: p204) identified funding and its ramifications best as “university staff recognised that no funding was free” yet given the context and nature of external funding linked conditions, government funding “carried less interference.” Ambos *et al.* (2008) discuss an amplification of this as ownership disputes and tighter controls of intellectual properties can arise as part of commercially driven university research. Lomas (2004) has indicated that opportunity costs can arise as part of resource reallocation and in addition to this highlights that these need not lie solely within the financial and monetary sphere and can affect university autonomy as new tighter regulatory regimes are enacted to cope with funding-linked performance measures. Rowland *et al.* (1998) questions the validity of the dichotomy between RAE demands against the push by government for improving teaching quality with the competing demands further stretching universities both financially and in quality benchmarks.

This disparity extends to differences in opinions and objectives with commercial entities seeking to control and regain the remunerative value of collaborative innovations and its ownership rights as compared to freedoms of knowledge dissemination advocated by academics (Argyres and Liebeskind, 1998; Ambos *et al.*, 2008; Di Gregorio and Shane, 2003). Moreover Buchbinder (1993) is quick to reinforce that market-orientated funding measures alters patterns of management and can affect academic autonomy and collegiality, the form and transfer of knowledge no longer university goals stimulated by intellectual demands but rather by market concerns.

Nonetheless it is also important for universities to diversify their funding base in order to ensure a certain amount of institutional autonomy, freedom from total governmental funding reliance and ultimately better interaction with industry. Chiang (2004), Goedegebuure *et al.* (1994) and Clark (1998) argue that university autonomy is enhanced through such funding diversification and provides universities with discretionary money to allocate as they see fit. Inevitably selection of funding sources focused upon the accumulation of government monies or those from external organisations will determine the organisational orientation of universities.

Yet as Sizer (1992: p166) comments, there is an inherent capacity for “market forces and the actions of individual consumers to force institutions to take seriously the need to assess and deliver teaching quality,” and demonstrate their drive to achieve this as the government, as monopolistic buyer, alters the funding dynamics within HE.

2.14 Managerialism

Managerialism is widely understood as the assimilation and adopting of private sector techniques of management and management focus into the public services (Brunetto, 2001; Pollitt; 1990; Turnbull *et al.*, 2008). Its beginnings in the UK stemmed from Margaret Thatcher’s First Conservative Administration in the early 1980s, which aimed to reduce the burden on public sector resources (Deem, 2006; Pollitt, 1990). Pollitt *et al.* (2007; p1) explain that “financial crises, discontent about the inflexibility of administrative procedures and decreasing public trust” led to the need and assimilation of managerialistic ideologies.

Private sector management focused on ensuring effectiveness without sacrificing efficiency and economy built on the ethos of improving profitability. Applying similar management approaches the government embarked on improving the effectiveness of public expenditure through a campaign of increasing bureaucratic scrutiny and accountability (Davies and Thomas, 2002; Deem and Brehony, 2005; Dixon *et al.*, 1998; Hendry and Dean, 2002; Kirkpatrick and Lucio, 1995), a method viewed by Pollitt (1996), Randle and Brady (1997a) and Terry (1998) as part of Market-Type Mechanisms (MTMs) introduced by government. It sought to audit public spending to ensure efficient and effective usage of public funds to deliver specified quality benchmarks and assessments. These ideologies encompass the managerialistic paradigms highlighted by Pollitt (1990: p2) of “continuing increases in economically defined productivity” and the view of “management as a separate and distinct function.” The effects of managerialism within the public services were widespread affecting the National Health Service (NHS), government councils and education (*ibid*). The approach seemingly introduced more decentralised management and administration, moving towards usage of divisional structures and MTMs (Pollitt *et al.*, 2007), fashioning more structured corporate management hierarchies that provide a quick remedy to universities in the ever fluctuating education sector (Denman, 2005). Simkins (2000: p321) takes the view that

managerialism is derived from “concerns focusing around organizational objectives and outcomes and the deployment of resources as defined by management in response to their interpretations of the environmental forces with which the organization is faced.”

The reduction in government funding amidst a time of substantial growth in the education sector prompted a serious dilemma within the different institutions. Not only were they required to ensure stringent quality in education within a growing sector; they were required to do so with diminishing funds (Henkel, 2004, Pollitt, 2000; Simkins, 2000).

The approach of managerialism was strongly focused upon “delivering economy, efficiency and effectiveness” seen as the 3Es of management techniques (Trowler, 1998: p93). He documents the following important value structures and beliefs that are core ideologies within managerialism (*ibid*: p93-94):

- Management is seen as crucial for organisation and social amelioration; managers should have the right to manage;
- There is an orientation towards the customer and the ‘market’ rather than the producer;
- There is an emphasis on individualism and an acceptance of the status quo;
- A ‘policy science’ approach to the understanding of policy-making and policy implementation is adopted;
- The management of change is seen primarily as a top-down activity;
- Staff in an organisation are seen as relatively easily ‘managed’ through clear procedures which take well-understood patterns of motivation into account;
- In education, an atomistic and mechanistic understanding of knowledge and learning is adopted.

Pollitt (1990: p7) adds to these ideologies as a “systematically structured set of beliefs, not just a random assemblage of attitudes and superstitions”. Yet within HE the mission and vision of profitability of the corporate sector conflicts with the inherent altruist properties of education (Harvey, 2005; Srikanthan and Dalrymple, 2003). The contrasting values and beliefs of the private sector and education created additional issues for both government and university management to nullify. Moreover increased bureaucracy, focus on mission objectives, and responsibility to stakeholders have magnified new forces

for universities to consider (Buckland, 2004; Dixon *et al.*, 1998). Pollitt (1990) argues that the assimilation of such methodologies into the public sector within the UK constituted the entry of a 'foreign body' into traditional public good and welfarist ethos.

Current discourses have highlighted the resistance by academics of the entry of increased accountability and control within HEIs. Research council funded empirical research undertaken by Deem *et al* (1998-2001) on managerialism alongside that undertaken by Wallace *et al* (2006-2008) on organisational leaders within UK have highlighted these issues. The differing approaches of autonomy and freedom to conduct teaching and research prevalent in university management were incompatible with new required bureaucratic and administrative restrictions (Simkins, 1994; 2000; Hewitt and Crawford 1997). Academics have been prone to resist authoritative dominance and administrative control (Eustace, 1987).

Traditional ideals of university education providing a social contribution through education and in turn wealth generation alongside disseminating new research discoveries into the public domain are seemingly secondary to managerialist principles that ensure a healthy financial standing (Deem *et al.*, 2007; Srikanthan and Dalrymple, 2003). Whilst the more defined and achievable goals of the performance targets may provide tangible benchmarks of success, the intrinsic benefits of quality education and the receipt of knowledge are far less measurable (Grace, 1989; Stilwell, 1998).

Instead universities are increasingly pressured to accept and assimilate managerialism techniques and private sector orientation striving to achieve the 3Es. Simkins (2000: p323) remarks "managerialism might be argued to be virtually synonymous with the predominance of the chief executive role," indicative of more corporate banter.

These approaches are reflected in Randle and Brady's (1997a: p230) understanding of managerialism. They highlight managerialism and its ideologies to include:

- Strict financial management and devolved budgetary controls;
- Efficient use of resources and an emphasis on productivity;
- Extensive use of quantitative performance indicators;
- The development of consumerism and the discipline of the market;

- The manifestation of consumer charters as mechanisms for accountability;
- The creation of a flexible workforces, using flexible/individualised contracts, appraisal systems and performance related pay; and
- The assertion of ‘the managers’ right to manage’.

Similarly Simkins (2000) documents the managerialist ideology to reorganise institutional dimensions towards one that exhibits tighter senior management teams, clearer middle management roles, more formal planning and agendas dominated by measurable performance. Likewise Gleeson (2001) and Patrick *et al.* (2003) highlight this as the growth of ‘performativity’.

Bleiklie and Kogan (2007) identify the application of quality assurance processes and increased enforcement of academic transparency as indicative elements of managerial culture and ethos and further highlight the creation of new powerful managerial infrastructures. Nonetheless the authors are also keen to assert that new performance indicators and measures tend to be assessed and influenced by academics alike, creating elements of inclusivity.

While the application of new private sector management mechanisms enable better and more accountability within public sector management the very nature and focus of corporate approaches differed substantially from the socially contributive goals of public services (Clarke *et al.*, 2000). Managerialism it seems deferred strongly from classic public administration paradigms focusing on “bureaucratic rules to an external orientation” (Pollitt *et al.*, 2007: p3). This was further exemplified by a push towards manager-academics (Deem, 2004; Deem and Brehony, 2005) and the reinforcement of organisational leaders (Clarke *et al.*, 2000; Jephcote *et al.*, 1996; Simkins, 2000). Changes in teaching roles towards increased focused on bureaucratic demands have further led to lengthier working hours (Gewirtz, 2002) alongside new corporate centred dynamics assimilated into the welfarist and liberal stronghold of education (Henkel, 2000; Holman, 2000).

Trowler (2001) identifies managerialism not as a specific technique or ideology but a mix of both “framework of values and beliefs about social arrangements and the distribution and ordering of resources.” His understanding examines managerialism as a force highly

focused on effective usage of resources drawing together different management techniques and approaches to satisfy this goal. The ideas of market responsiveness, efficiency and economy measures and management scrutiny are hallmarks exemplifying managerialistic approaches and tendencies.

Trowler (2001) goes further to highlight the assimilation of managerialism in HE to a state of 'new higher education' as further averred by Winter (1991). Trowler (*ibid*: p185) cites changes within the sector as:

“...epistemological assumptions which commodify knowledge, and value forms of learning acquired outside the academy, including non-propositional and even demotic knowledge; responsiveness to the ‘marketplace.’”

In essence he highlights the current plight of balancing both knowledge generation for public good and new assimilation of managerialistic approaches. An outcome that Gewirtz (2002: p12) finds untenable owing to the corrosive nature of managerialism, its risks to quality, sustainability and democratic accountability, and ultimately its continued exacerbation of inequalities.

These effects create both an environment that is geared for change evident in the new marketplace culture of students as customers and the generation of modularity of degree programmes (Liu and Dubinsky, 2000). The quantified 'credit framework' of academic degree structures and awards allows clearer assessment of learning alongside increasing facilitation of external accreditation and work-based learning, while seemingly beneficial, displays increased need to portray accountability and effective resource usage. Yet do managerialistic assumptions alongside market and fiscal tendencies promote an appropriate ethos for HE management and orientation?

While managerialism provides clear conceptual approaches to both management and resource management does the business rhetoric of 'customers', 'business plans' and 'markets' digress the true needs and welfare of quality education? Hartley (1995) highlights significant worries that the prevalent usage of managerialism may ultimately lead to a 'McDonaldisation' of the sector, creating a franchise and perhaps soulless approach to learning in universities. The commoditisation of HE, as part of

managerialism ideology, transforms organic learning into a mechanistic approach within a production line of quality management and process charts.

2.15 Managerialism and its other forms

Managerialism emphasises an ideology and framework that promotes more systemic management and control of both people and resources with a goal to ensure continued productivity through more effective and efficient means. Built upon many of the theories behind the scientific management theory as averred by Frederick Winslow Taylor (1911 cited in Pollitt, 1990), the assimilated managerialistic approaches into HE highlights inferences of what Pollitt and others (Deem and Brehony, 2005; Hood, 1995; Hood and Scott, 1996; Hood *et al.*, 2004) view as ‘new public management’. Its different manifestations arise out of different application and understanding of the idea of managerialism.

Managerialism itself builds on scientific management techniques and theories focusing on maximising productivity and orientation towards meeting consumer wants and market needs (Deem and Brehony, 2005). New public management (NPM) highlights similar approaches but a shifting viewpoint of the public services away from public welfare providers towards economically centred and financial priorities as governed by state agencies (*ibid*). The shift in organisational goals from traditional ‘public good’ services in the direction of more business-like initiatives symbolises the NPM dynamism. Yet Pollitt *et al.* (2007) document the adaptability of NPM and its ability to blend accordingly to match local requirements, which in turn highlights its lack of consistent form for application. Ferlie *et al.* (2003: S9) highlight the view of NPM as “divorced from the policy and political contexts in which it is located”, as simply “management in a different arena from that of the public sector.” The authors nonetheless comment that the NPM’s approaches should be ‘intimately’ linked to enable better communication of the needs of both and provide more authority for managers to work.

Pollitt *et al.* (2007) argue that the use of performance indicators as NPM approach is inconsistent in its approach. The usage of indicators to improve overall effectiveness, productivity and in turn quality supposedly equates to lessening administrative burdens and improved cost efficiencies. Yet the costs associated with quality control and

implementations of these performance indicators are insufficiently considered, creating contradictions in NPM application.

Pollitt (1990) further highlights the existence of 'neo-Taylorism' as an extension of managerialistic ideologies, which focuses similarly upon performance indicators as measures of achievement and merit and drives target setting.

Moreover assimilation of managerialism can take two contrasting forms approaching university management through hard managerialism that emphasises the role of management and the 3Es to a paramount position. Conversely, soft managerialism incorporates its ideologies to provide solutions and aide in difficult management situations that would benefit all (Trowler, 1998; Pollitt, 1993).

2.16 Managerialism and structure

The changes required of managerialism and managerialistic culture is contingent on management structures that are welcoming and assimilative of these changes. Traditional collegial management structures, which themselves hold strongly to time-honoured practices and established 'way of doing things,' would inevitably more rigidly shun managerialistic techniques (Eustace, 1987). Newer and more flexible structures that have had little time to settle may be able to adapt and promote the new managerial tendencies, filtering them down to faculties and departments. Literature within the area suggests that the proliferation of managerialism within the HE sector is brought about not only by a need for new management practices within changing environments but by structures that are more accepting of managerialism (Clarke *et al.*, 2000; Farahbaksh, 2007; Deem and Johnson, 2000). The ability of university management that is able to embrace and proactively engage its members provides a versatile hierarchy and structure for managerialistic tendencies (Bottomley *et al.*, 1999).

While it is also true that flexible and more loosely coupled structures are organic in adopting new ideologies along changing times (Weick, 1976), managerialistic tendencies require realignment towards more organised and coordinated organisation (De Boer *et al.*, 2007). Indeed Birnbaum (1988) highlights that loosely coupled systems are often viewed as inefficient, prone to waste and indecisive leadership, yet he is also quick to recognised

the ability for these ‘partially independent and specialised organisational elements’ to improve sensitivity to the environment. Acceptable structures require coherent and well-communicated engagement with employees. The need to communicate central goals and new mission and vision orientation is key to managerialistic effectiveness. The traditional college and collegial orientation of older universities would battle and challenge these erroneous economic dispositions (Gewirtz, 2002; Henkel, 2000).

Trowler (1998) highlights the high compatibility of managerialism’s ideologies with the new credit and modular framework of university education (see table 2.6). The ability of managerialism to exploit HE’s “economy and efficiency; its potential for market responsiveness and income generation; its ability to extend managerial surveillance and control and its ideological and discursive symmetry with New Right and managerialist ideology” is indicative of its susceptibility and acceptability (*ibid*: p95).

Trowler (*ibid*: p95-100) further provides more details explanations on how these 4 reasons apply:

- Increased economy and efficiency;
- Market responsiveness and income generation;
- Managerial surveillance and control;
- Ideological and discursive symmetry with New Right and managerialist ideology.

Table 2.6 Detailed explanation of compatibility of managerialism and university modular frameworks

The influx of managerialist rhetoric and ideologies into HE and university management highlights perhaps a new acceptance of private sector techniques. Indeed the increasingly competitive nature of HE alongside limited funding propagates and fosters changes to traditional academic centre management (Jarvis, 2001). The ability of managerialism to

satisfy performance indicators and financial specifications amidst the increasing scrutiny of government asserts its attractiveness in the sector. De Boer *et al.* (2007) view its methods as seeking to create more ‘complete’ organisations undertaking a process of restructuring. Indeed the authors along with Brunsson and Sahlin-Andersson (2000) explain that these elements of restructuring operate as three distinct entities – constructing identity, constructing hierarchy and constructing rationality.

Constructing identity exists as alterations to the current dynamics, forms and ideologies of the organisation and of what is accepted as the socially constructed concept of the institution itself. Within universities this highlights the concept of what its aspirations are and seek to be, namely its fundamental and inherent goals of education and learning (De Boer *et al.*, 2007). Yet it is also worthwhile to note that these identities can exist out of common and current fashion and trends influenced by popular ideas within the larger environment (De Boer *et al.*, 2007; Czarniawska, 1997; Gioia *et al.*, 2000), perhaps indicative of current managerialist preferences.

Yet it is also pertinent for organisations seeking to implement managerialism’s ideologies to contain a hierarchy that has the capacity or is suited. De Boer *et al.* (2007) question the viability of any practice or operational methodologies without the required infrastructure or capacity of organisations to cope and highlight the need for a constructing hierarchy that is suitable. A view similarly held by Bottomley *et al.* (1999) and Turnbull *et al.* (2008) as they highlight the need for proactive management and development to stimulate and monitor any application of change, with a keen focus upon available resources (both in terms of finances and human capital).

Changes to the current needs and end-goals of universities towards targets more aligned with corporate culture entail the need for constructing rationality. The notion stresses that organisations are directed towards “attaining goals through formal and rational means” (Weber, 1968 cited in De Boer *et al.*, 2007: p34) and as such realigning university orientation in favour of forecasting results and preferences, allocating accountability and measuring performances – elements reflective of managerial connotations.

2.17 The Case for Management

Pollitt *et al.* (1998) argue the case for increased management within public services, highlighting this improved structure and consistency in meeting goals and benchmarks. The introduction of managerialism in the UK was aimed at reducing the strain of the global fiscal crises (Ackroyd *et al.*, 2007) through controlling costs and ensuring appropriate utilisation.

The concepts promoted by increased management identify accountability and enable more stringent and transparent governance of resources to achieve set targets and goals. Ackroyd *et al.* (2007) promote the use of management reform as a 'key strategic weapon,' which would provide improved coordination and supervision of institutional management.

Indeed managerialism and increased management in universities would enable a more effective pursuit of institutional goals and objectives while satisfying the requirements as set by government benchmarks and quality control. The impetus and strongly constructed management paradigm would facilitate improved achievement of targets and meeting of objectives, perhaps through better techniques of management by objectives (MBO) and Total Quality Management (TQM) (Kanji and Tambi, 1999). These methods reward success and punish failure creating a culture of increased administration and perhaps 'active managerial function' to ensure adherence and realisation of targets, while authoritative management leads to results. Yet Birnbaum (1988: p58) warns that often management seeks goals that 'satisfice', establishing "criteria for deciding what an outcome would have to achieve to be considered satisfactory."

The approach enables more efficient control and management of resources befitting the political forces that seek to transfer more responsibility of allocated funding to university managers. Moreover the introduction of more executive management groups and business-like directors of school enables empowerment of individuals well placed to promote change and control (much like the Jarratt Report, 1985). The improved decision making speed of reduced committees and long-winded collegial practices further enables expeditious management and communication of policy.

Overall, managerialism and the techniques utilised, while creating increased bureaucracy and administrative labour, enable better and more structured control of resources in both human resources and funding. While the approach has its own limitations and fallacies it does advocate and promote the use of methodologies that can and do deliver results (Turnbull *et al.*, 2008). While it may also be short sighted to assume that managerialism and its ideologies can solve the problems faced by UK HE the introduction of clearer organisation and management of universities' departments and structures expedites the achievement of goals. The improved and increased scrutiny by management further fosters better alignment and the meeting of quality audits and results orientated funding (Randle and Brady, 1997a; 1997b).

Ackroyd *et al.* (2007: p19) further highlight the change in professional values as senior individuals “identify with the changes and have sought to benefit from them.” While these insights may come from the health and social sector, the proliferation of such acceptance seems to be spreading into education. The acceptance and assimilation of management discourse, while often met with cynicism (Jones, 2001; Ackroyd *et al.*, 2007), “enable[s] cost consciousness, performance review, standardisation and evidence based practice” (Ackroyd *et al.* 2007: p20).

Kitagawa (2005: p12) while examining policy contexts in several OECD (Organisation for Economic Co-Operation and Development) countries, further considers the improved autonomy of new management paradigms through centralising power and control to upper management which would open up “opportunities for some universities to engage in entrepreneurial activities.” This approach would alter traditional management structures and promote more commercial engagement generating more rewarding incentives for business-orientated research. Failure to identify these opportunities and evolve may not only prevent a move forward but perhaps a stagnation of management archetype as the environment and policies that govern university education continues to alter.

The need for public institutions today, such as universities, to operate under their own aegis but within publicly accountable standards and benchmarks (Turnbull *et al.*, 2008) is perhaps indicative of the catalyst for management practices. Assessment of quality through RAE, quality audits and student number linked funding require universities to accept and integrate management ideology to ensure not only more cost-effective

measures but approaches that work in harmony with the needs of the external environment (Morgan, 2004). Financial constraints and changing “goalposts” stimulate such transformation of university management to adopt managerialist ideologies in order to cater for a new performance-orientated culture (Simmons, 2001). Turnbull *et al.* (2008: p21) likens this to “QAA ‘recommendations’ [which] are expressed in the same way as an armed robber ‘recommends’ that he be given money.” While undeniably the shift towards management culture benefits university operations, the shift in paradigm from social benefit to profit orientated focus can alter the balance of the university of learning and its academics. Moreover Pollitt (1996: p86) reminds that “market or market-like solutions to public administration” can reach a stage where they seem automatic or “ritualistic” with increased minimisation of the distinctiveness through overly generic techniques. Ultimately as Turnbull *et al.* (2008) argue, there is inevitably a need for flexibility within university operations and activities against a background of such diversity in institutional cultures, structures and goals, alongside the drive for greater transparency.

2.18 Modern trends

It was traditionally the privileged or elite that could afford access to HE and universities. The availability of places was limited to mainly those with privileged backgrounds with sufficient intelligence and financial backing in order to further their studies (Sutherland, 2008). Seen as perhaps a class and status war, access to less privileged backgrounds was severely limited by availability of places, costs and entry requirements. It was at this time that university education was reserved for the elite and rich fulfilling both the needs of the university and the demand for education at that time (*ibid*; Turnbull *et al.*, 2008).

In today’s environment, education is increasingly accessible by the less affluent and no longer limited to a select few. The improvements and increase in demand for HE has led to both a widening of access and availability of places. The changes are systemic of increased awareness of the financial rewards of further education (Bleiklie and Kogan, 2007). It is this realisation and perception of HE today that has led to growing enrolment rates from diverse cultural, social and economic backgrounds (*ibid*). The universal access to HE was highly beneficial. It nurtured and improved both the quality of life for many and the economic welfare of the country as a whole. The increase in a learned and well-educated society essentially enables a more capable workforce spurring the economy,

alongside prestige in research and scholarly discovery (Mohrman *et al.*, 2008; Sutherland, 2008).

The shift towards education of the masses created new dilemmas within the HE sector. The nature of elite university education created an arena where a select gifted few were granted a place of study. The move towards mass education has led to a barrage of worries in the form of reduce quality and a relaxing of entry criteria (Chitty, 2004; Deem, 2003; Henkel, 2000). Mass education, while altruistic in its ability to provide equal opportunities to the less fortunate, has not only stretched the capacity of the sector but has contributed to more generic programmes and assessments (Bleiklie and Kogan, 2007).

In addition to these changes, universities were reflective of Tayloristic (see Naylor, 1999 for discussion on scientific management) (Greenwood and Levin, 2001) tendencies and mechanisms (Randle and Brady, 1997a; 1997b; Trowler, 1998), assimilating more structured and scientific management techniques within their daily operations (Dearlove, 1995; Pollitt, 1990; Terry, 1998). Increased management ideologies towards effective control of finances, operations, logistics, marketing and most importantly people highlight the new penchant for corporate style practice.

Greenwood and Levin (2001) argue that while universities would like to distance themselves from a 'Tayloristic' orientation, their inherent structures, although varying from institution to institution, contain reflective and often similar approaches and departmentalisation as those prescribed by scientific management techniques. The "jealously defended" (*ibid*; p436) approach undertaken by academics on ensuring continued autonomy and freedoms in research and learning alongside scholarly control over programme content further highlights such reluctance to change. This view is echoed by Dearlove (1995: p167) who stated that "academics want to be left alone to get on with their own work" seeking only to challenge and inject their rights when change no longer befits the needs of the collective.

The tendency for universities to embody 'ivory towers' is further challenged (Greenwood and Levin, 2001) as universities are supposedly required to isolate themselves from the outside world, but yet are key contributors and participants in society (Etzkowitz *et al.*, 2000). In addition to this, the nature of research and learning ensures that engaging with

other institutions and the public at large creates a collaborative tendency that differs strongly from what an 'ivory tower' embodies.

This issue is further affirmed by the willingness of universities and perhaps senior management to compete in global peer rankings and league table standings alongside increased marketisation of courses to improve student numbers. Chapleo (2007) demonstrates the growth for branding and marketing within universities citing a modern need to ensure both national and international recognition through strategic use of branding strategies.

Bleiklie and Kogan (2007) and Slaughter and Leslie (1997) highlight and discuss the proliferation of the ideology of 'academic capitalism' as universities seek to profit with intellectual capital and industry alliances. Clark (1998) similarly discusses the introduction of "entrepreneurial universities" whose approach is to endeavour to improve funding via collaborative links to corporations and business. Nonetheless both Chapleo (2007) and Sargeant (2005) discuss the potential ill effects as a product of unhealthy competition, which could incite dubious and questionable activities.

2.19 Manager-Academics

The modern debate on prolific management in universities highlights an assimilation of managerial roles into traditional academic activities. Academics both at lecturer and professorial levels are increasingly approached to incorporate more administrative and management duties alongside the current academic workload (Deem, 2004). The inclusion of bureaucratic paperwork together with management of subordinates and subject groups displays a new dichotomy between what is seen as the traditional and historic academic workload to that of the modern academic (Birnbaum, 1988; Chitty, 2004). The nature of universities' positions today entails some form of administrative and bureaucratic activities. Nevertheless the plethora of arguments and debates in the area highlights the increasing prominence and emphasis on ensuring that efficient paperwork and protocol adherence is appropriately undertaken (Deem, 2004; 2006; Henkel, 2000; Holman, 2000). The current trend is not only the promotion and acceptance for the need for manager-academics but rather a university structure that is run by managers and directors echoing structures promoted in the private sector (the influence of

managerialism) (Clarke *et al.*, 2000). The entry of managers from more corporate backgrounds to undertake considerable governing of the various departments underlines the acceptance of more management centred styles in the traditionally academic focused university structure. Deem and Brehony (2005: p226) highlight manager-academics as “members of a social group having interests about power relations within higher education” with varying interests and purposes. Indeed there have been growing divides between academics and management (Deem, 2003; Deem and Johnson, 2000).

While no one can deny the need to ensure efficiency, effectiveness and ultimately productivity, the central and reoccurring argument is would this be at the demise of scholarly activities? The entry and assimilation of the manager-academic and directors provides a means to remedy and become proactively involved with the diverse external and market forces in existence. Yet the fundamental goals of university activities and focus need to remain with its academics. Current discourses on the area call attention to increasing worries that the balance sways towards management for profits and productivity rather than being academically centred (Deem, 2004; 2006; Gordon, 2003; Taylor, 2004). Yet others have highlighted universities that have stemmed the corporate movement, choosing to ensure scholarly pride and excellence while not forsaking the need to become more innovative and creative in their management structures and ideologies (Birnbaum, 1988, Kirkpatrick and Ackroyd, 2003).

The entry of manager-academics has enabled more effective management of funds and administration of university activities, partly as a product of increasing benchmarking and targets as set by government (Deem and Brehony, 2005). Political forces to ensure accountability and effective usage of public funds have compounded both the effects and need for management savvy academics (Pollitt, 1990). As universities strive to meet government targets for quality and student quotas the strain on traditional management paradigms heightens (Farahbasksh, 2007). The measurement of quality by numbers and quantitative computations of student numbers, retention and research disseminated create an environment geared and requiring of managers and university directors. The need for clearer management and quick decision making alongside more proactive and customer-orientated techniques has perhaps opened the door to new management (*ibid*). The business of HE calls for more versatile and less traditional archetypes of university

structure and management moving towards more speedy and swift decision-making replicating private and corporate techniques.

2.20 Globalisation

Many of the issues related to competition have occurred as a product of increased globalisation of the education sector. The entry of distant learning programmes and global universities competing against one another to amass bright students (Morey, 2004) and in turn financially viable intellectual property, has transformed HE into a commercial entity and industry (Bleiklie and Kogan, 2007; Naidoo, 2003). The poaching of talented and skilful students together with professors and the research elite citing academic citizenship (Macfarlane, 2007; McSwite, 2001) display the increasing accessibility of expertise through the culture of globalisation as academics and institutions alike seek to pursue more industrial activities (Dietz and Bozeman, 2005; Bleiklie, 2003). The ability to employ and confer tenure and professorships highlights the commercial behaviour to ensure competitive research advantage and considerable research prestige, furthering organisation reputation (Tapper and Palfreyman, 1998). Gray (1989: p126) though is keen to emphasise that there is a marked difference in the relationship between academic reputations as opposed to institutional ones, where “a don [senior academic] who personally has done little distinguished work may be attributed with the esteem accorded to the department.”

The surging movement of people across countries further fuels issues affecting HE as students from far and wide are attracted, at times, through inventive and expensive marketing campaigns, to conduct both their studies and research interests at a particular institution. The league tables of both national and international universities highlight how the sector is increasingly becoming more paranoid of achieving the best scores to portray their quality towards potential students seeking to obtain a world class education (Owen-Smith, 2003).

The effects are not confined to the UK with American universities strongly competing to attain Ivy League status and heights (Bok, 2003; Morey; 2004). The considerable amount of research funding that comes from research prestige and quality of dissemination alongside potential private financial remunerations not only creates an increasingly

competitive global sector but also highlights the widening one-upmanship between institutions and academics alike (Gray, 1989). Owen-Smith (2003) charts new terminologies such as Research One designations for highly research intensive universities within the United States. In the UK, the Russell Group of Universities, set up as a collaboration coalition between research intensive universities was echoed by other groups such as the N8 (University of Leeds, 2007) and 1994 Universities Group (1994 Group, 2008) seeking not to be left behind in the research 'game' (Mayhew *et al.*, 2004) (see table 2.7). Perhaps similar to how the EU was created to ensure financial and economic virility against the US and Asian countries, the coming together of various institutions highlights a new need to be collaborative and even merge to compete effectively. A notion identically reflected in the need for French universities to work alongside European counterparts –

“If Europe of the regions is to be built... curricula must be harmonised at the European level and the content diversified at regional level to bring it as closely into line with social needs as possible”

(Allies and Troquet, 2004: p63)

Much like the EU, the members of the various universities groups have very distinct approaches to university management as well as remedies to their own external environment and competitors. While the unified system (polytechnics into universities) sought to create a more generic HE system in the UK it seems that globalisation and the commercialisation of the sector may require universities to seek and discover new niches and competitive advantages that allows them to differentiate themselves from other institutions at home and abroad (Buchbinder, 1993). As such there is, on one hand, a need to become collaborative and nationally and regionally integrated, yet similarly universities should require of themselves to be strategically positioned or 'specialised' to contend with growing competition globally (Allies and Troquet, 2004), increasingly blurring the “institutional and normative boundaries between the realms” of academia and industry Owen-Smith (2003: p1082).

Indeed even in other parts of the world, universities in Japan (Kitagawa, 2005) and Australia (Onsman, 2008) are facing similar paradigm shifts towards education with commercial value (Buchbinder, 1993) and increasingly institutional management

hierarchy and orientation. Etzkowitz *et al.* (2000) document similar plights within Italy, Germany, and Latin America. Moreover these universities have proceeded to promote and ensure efficiency and effectiveness nationally in order to structure their capacity to adequately internationalise and form strategic alliances regionally and globally (Kitagawa, 2005).

The increasingly competitive nature of HE globally is a catalyst and emphasises shifts in university management culture. While it is also true that a university retains many of its traditional altruistic tendencies and focus, the entry of new mission and goals for strategic planning is rapidly spreading. The need to compete regionally and now on a global scale requires significant shifts in structure and management ideologies (Mohrman *et al.*, 2008), highlighting the effects of more pragmatic pressures rather than ideological commitments (Tapper and Palfreyman, 1998). The growth of PhDs sought from developed nations by developing countries alongside new worldwide recruitment strategies are all indicative of the globalised nature of education today (Mohrman *et al.*, 2008). Moreover the growth of industry-linked research (Buchbinder, 1993) has incited a new culture towards not only 'publish or perish' but to 'patent and publish' (Blumenthal *et al.*, 1996; Owen-Smith, 2003).

Public services operate substantially differently to their private counterparts, yet their less profit-centred focus has not negated their need to be accountable and effective. Similarly HE, while it may operate in the confines of a public service, needs to achieve its required targets and goals to not only remain competitive but to ensure a steady flow of funds to ensure survival (Pollitt, 1990; 2003). Globalisation and commercialisation may require adoption of more familiar private sector techniques into the public services, highlighting deficiencies and undertaking swift remedial action. The impact of mass standardisation of HE and perhaps a more soulless approach to learning and research may creep into the HE ethos as a 'changing with the times' rather than out of desire. Nonetheless academia and its intrinsic values call for different intangible milestones (Birnbaum, 1988; Stilwell, 1998). Moreover such shifts in organisational orientation and direction can affect the quality of HE as "novel criteria to evaluations of actions and altering [of] long-held standards for professional and organisational success" dominate academic planning and remunerative arenas of commercially sound scholarly activity (Owen-Smith, 2003: p1082). The sector is not rigid to change but rather has a strong desire to resist oppression

and reductions in professional autonomy. Even then universities are inherently unstructured to cater for such globalised and commercial objectives (Owen-Smith, 2003; Noll, 1998) with academics less concerned with the commercial applications of their research (Owen-Smith, 2003).

To a certain degree globalisation challenges the traditional collegial form of university management and hierarchy. It calls for a more corporate orientation in a bid to not only remedy the negative external forces that may arise but to exploit the potentially lucrative opportunities that may exist. As part of financial management criteria it has further fostered a '*consensus ad idem*' or 'meeting of the minds' approach to university management as senior managers work alongside academics. Nonetheless globalisation has contributed positively to HE and learning. The accessibility and wider channels of communication and travel have allowed more collaborative research alongside more extensive and creative discourses on current and new knowledge (Lee, 2000). The business of education may inevitably be coming of age but the potential for worthwhile and important research and sharing of research may come as a welcomed by-product of competitive paradigms (Jarvis, 2001).

This is of considerable concern. Will HE in the future move towards mass standardisation providing education generic across the sector? Such shifts in HE would allow for greater applicability and endorsement of UK programmes globally, but may negate the competitive advantage that good institutions may have regionally and internationally. Harman and Harman (2008: p104) highlight the increasing mergers of universities as part of strategic aims to "enhance their competitive position". The politics of HE needs to be examined to ensure that in creating an equal playing field for all HEIs, it does not cannibalise its traditionally well performing universities in the international market (Chitty, 2004; Deem *et al.*, 2008). The need to balance equity, funding and control in order to achieve a more harmonious HE sector is important, yet not at the loss of competitive advantage of UK HE as a whole. Without doubt the competitive nature of commercially aware HEIs today requires some form of differentiation and niche in which to operate (Kyvik, 2004). If all institutions could perform well or on a par with everyone else the sector may enter the realms of mediocrity. Perhaps there is a need for globalised competition with universities putting emphasis on what they do well, in the hopes of receiving recognition and funding for it. The unified structure of HE allows for more

support between universities and government, but undeniably differentiation and taking the road less taken would enable a more attractive sector for potential students and investors (Buchbinder, 1993).

2.21 Collaborations

Increasingly universities are focused upon collaborative measures and programmes with both national and international universities and businesses. Partly seen as a measure to strengthen their position and expertise, universities have collaborated widely on scientific research, pedagogy and even the transfer of knowledge (Markman *et al.*, 2008). While it may be asserted that traditionally knowledge transfer between university professors and research groups were commonplace, increasingly the trend of such collaborative measures is to ensure competitive advantage and considerable funding (Mohrman *et al.*, 2008). The modern HE environment, on the other hand, is seemingly focusing on university wide collaborations as a form of potential remunerative gains (Brown, 2004). Moreover it provides ‘mid-range’ universities with an avenue to strengthen and develop their regional recognition alongside improved scale economies (Markman *et al.*, 2008; Patterson, 1999). The creation of university groupings such as the Russell Group, which was formed in 1994 at a meeting convened in Russell Square, highlights a collective membership of universities to affect change and policy (see table 2.7 for its members). The action group Universities UK provides a means for members to voice concerns to government in order to “advance the interests of universities and to spread good practice throughout the higher education sector” (Universities UK, 2008).

In addition to this increasing focus upon collaboration is the perceived prestige that exists within collaborative research. Indeed the trend for research papers today highlights a new need for researchers to write papers with other researchers in other institutions, which in itself indicates increased scholarly integrity and rigour in discovery (Markman *et al.*, 2008). While the checks and balances within universities may indicate increased scholarly integrity and quality control, there are without doubt new calls for intensifying scrutiny (BBC News, 2008) highlighting increasing distrust and more accountability of public funds. Nonetheless Patterson (1999) highlights that the transformation of research and collaboration has removed the divide and distinction between university and non-university sectors.

The benefits of course, one could argue, remain with good collaborative measures, as not only does this allow wider debate and discussion, but provides increased perspective into any one issue together with the potential remunerative gains from research commercialisation (Markman *et al.*, 2008). These growing pressures together with increased performance measurement and promotion of Business-University collaborations (Ackroyd and Ackroyd 1999; Shattock 1998; 2004) highlight the plight within the current competitive environment of HE.

These benefits are further seen by the growing advantages created with collaborations with the private sector. The Lambert Review of University-Business Collaborations (Lambert Review, 2003) (discussed in chapter 2.9f) calls for increased partnerships not only to match the needs of the labour market but for new non-governmental funding (Lomas, 2004). Much like in universities in America to include the Ivy League Universities, attaining considerable amounts of private research funding through positive results in the sale and enterprise of scientific discoveries. This is perhaps the growing trend in UK institutions and the route that may best be followed (Etzkowitz *et al.*, 2000).

Yet, the prevalent issue with business-university collaborations lies in the need to ensure unbiased research results that do not deter from the rationale of university fundamentals in favour of for-profit ideologies (Etzkowitz *et al.*, 2000; Morey, 2004). The attractiveness and allure of less restrictive non-governmental funding sought within the private sector creates an environment for increased competition and dangers to academic integrity in universities. While no one can dispute the quality and importance of such research, there is often the issue of losing direction (Bloland, 1999; Denman, 2005). Will universities so focused on attaining funding from the private sector lose sight of their public duty to society?

The increasing trend to promote distance learning and twinning programmes with other universities internationally highlights the globalised culture of HE (Morey, 2004). The need to venture into new markets, improve student numbers and compete with other world-class universities is indicative of the new environment that HE 'trades' in (Deem *et al.*, 2008; Owen-Smith, 2003). These new ventures are increasingly nurtured as a product of new management regimes and current university reforms (Kitagawa, 2005). Indeed

Allies and Troquet (2004) advocate the need to move towards more regional displays of strategic alliances to not only create uniformity in institutional reconstruction but to enable a more harmonised system meeting the needs of the current market of students.

Table 2.7 Listing of UK university groups and its members

University Groups	Members
<p><u>Russell Group</u></p> <p>An association of research-intensive universities in the UK aimed at maintaining highest levels of research, learning and knowledge dissemination.</p> <p>The group aims a</p> <ul style="list-style-type: none"> • Forming common positions on matters of concern, or opportunity, in respect of proposals or developments which would affect the maintenance and enhancement of the quality of research, its funding, its commissioning from sponsors, and the exploitation of intellectual property derived from it. • Forming common positions, in respect of proposals or developments, which would affect educational standards, student selection criteria and processes, and postgraduate training. • Forming an understanding and influencing the development of the strategy and objectives of the main organisations affecting research intensive universities • Undertaking or commissioning policy research on matters of relevance to research-intensive universities 	<ul style="list-style-type: none"> • University of Birmingham • University of Bristol • University of Cambridge • Cardiff University • University of Edinburgh • University of Glasgow • Imperial College London • King's College London • University of Leeds • University of Liverpool • London School of Economics & Political Science • University of Manchester • Newcastle University • University of Nottingham • Queen's University Belfast • University of Oxford • University of Sheffield • University of Southampton • University College London • University of Warwick <p><i>Source: www.russellgroup.ac.uk</i></p>

Table 2.7 Listing of UK university groups and its members continued.

University Groups	Members
<p><u>1994 Group</u></p> <p>Established in 1994, the groups aims to provide representation of its member universities to contribute and affect policies, sharing best practice and methods, and promoting of research potential.</p>	<ul style="list-style-type: none"> • University of Bath • Birkbeck, University of London • Durham University • University of East Anglia • University of Essex • University of Exeter • Goldsmiths, University of London • Royal Holloway, University of London • Lancaster University • University of Leicester • Loughborough University • Queen Mary, University of London • University of Reading • University of St Andrews • School of Oriental and African Studies • University of Surrey • University of Sussex • University of York <p>Source: http://www.1994group.ac.uk/</p>
<p><u>N8 Group</u></p> <p>A collaborative group of universities based in Northern England built upon ‘The Northern Way’ initiative to improve links between businesses and universities in the north.</p>	<ul style="list-style-type: none"> • Durham University • Lancaster University • University of Leeds • University of Liverpool • University of Manchester • University of Newcastle Upon Tyne • University of Sheffield • University of York <p>Source: http://www.ncl.ac.uk/press.office/press.release/content.phtml?ref=1129713945</p>

2.22 Onset of commercialisation

University administration and management is undertaken with substantial consideration of the issues of the 3Es, productivity and profitability rather than the importance of learning, research dissemination and upholding the values of education (Trow, 1999). Farahbakhsh (2007: p33) highlights the potential for efficiency and effectiveness to be viewed as the same thing with utilisation of recognised indicators of “profitability, productivity, various financial ratios and quantity and quality of outputs (qualified students, new experiences, new procedures, etc).” The increasing marketisation and commercialisation of HE calls for priorities placed upon management of funds and

marketing of programmes at the expense of traditional concerns for teaching and learning. Issues of accountability, profits, and student numbers prioritised over education and learning as fundamental tenets of University operations is not unfounded (see Bloland, 1999; Denman, 2005; Hendry and Dean, 2002).

Changes in HE funding mechanisms and government policies (Chitty, 2004; Henkel, 2000; Shattock, 2006; Trow, 1999) have created an environment of increased competition for both government and private sector funding. Additionally new funding allocations linked to student numbers and Research Assessment Exercises have prompted increased promotion of University courses to attract potential students and the enticing of professorships (Rafferty, 2003; Times Online; 2007) to aid in competing for funds. The sector as a whole has approached new management changes and stakeholder shifts with renewed rigour to combat reducing government funds and professional autonomy (Bleiklie and Kogan, 2007). Seen as a means to attain and at times exploit the potentially lucrative market of HE nationally and globally, commercialisation within HE has enable universities to be less restricted to covert controls of government policy linked funding. The new ability to engage in global and regional partnerships has allowed new avenues of cash flow and income (Ambos *et al.*, 2008) creating more flexibility within stretched financial budgets enabling more relaxed university spending. The growth in the sector for more non-governmental sources of funding has led to a new focus on the private and corporate sector for potentially remunerative collaborations on research activities and training (Henderson *et al.*, 1998; Mowery *et al.*, 2002). The drive of commercialisation alongside changing and fluctuating government funding has driven universities to undertake more commercially savvy activities tying in strongly and networking (Lockett *et al.*, 2003; Low and MacMillan, 1988) with corporations and external organisations to seek other sources of funding together with the potentially rewarding entrepreneurial nature of some collaborative research (Ambos *et al.*, 2008; Goldfarb and Henrekson, 2003; Gulbrandsen and Smeby, 2005).

This has not been a perfect system as although the RAE has contributed to enlarging emphasis on research quality, expertise and recognition with an aim that the monies received can be channelled into university operations, universities without the capacity to compete found themselves falling behind the older and larger research centred institutions (Bleiklie, 2003; Page, 2004; Shattock, 1998).

The recent introduction of top-up fees (HEA, 2004) has further created additional complexity. Its introduction triggered new worries on potential reduction in student enrolment numbers as fee amounts were raised to a maximum of £3000 (Blair, 2006a; Cassidy, 2006; Pennell and West, 2005) alongside new demands from paying students. This is perhaps highlighted best by legal actions, based on contractual law, brought upon universities that fail to deliver what they promised (Onsman, 2008; Turnbull *et al.*, 2008).

The changing dynamics and status quo displays HE entering a stage where the notion of students as customers and education as a product is creating new pressures to no longer adhere to traditional learning ethos (Liu and Dubinsky, 2000; West, 2006). Instead competition for students against other regional and national universities is constantly increasing. The commoditisation of learning and research has enabled more quantifying of education quality and profitability calculated in student enrolment and retention rates (Onsman, 2008). The increased marketing of programmes and courses that both aide personal and vocational training to entice potential students highlights the commercial nature and competitive paradigms within HE now. The ‘poaching’ of professorships from other universities (Tapper and Palfreyman, 1998) globally further highlights the league table game, that promises (at times empty) renewed vigour in student numbers and public trust in quality (Mohrman *et al.*, 2008). Moreover as Macfarlane (2007: p263) notes the possession of a doctorate today is seen as “de rigueur” or fashionable. The international measure of university rankings may provide students with a means to gauge research and teaching quality through perceived image (James *et al.*, 1999), but is this for the university as a whole or just its well performing departments as Tapper (1998) questions. There is an increasing trend of ‘mis-marketing’ with university positions within the national and regional league tables. “Highest ranked new university” and “high student satisfaction scores” all highlight the growing commercial nature and potential competitive streak of the sector (Frean, 2008; Newman, 2008). A view supported by Mohrman *et al.* (2008) and Levin *et al.* (2006) as they highlight disparities in perceived quality and differences in university ranking calculations indicating prestige and reputation rather than educational virtue.

Indeed the changes highlighted in the management of universities in terms of their direction and goals, perhaps signifies the end of traditional scholarly collegial

management (Harvey, 2002b). The move towards more commercial and managerialistic orientations suggests a shift towards more bureaucratic and corporate style management, which promote quicker decision making, diverting focus away from the quality of learning and research (Srikanthan and Dalrymple, 2003). Indeed commercial interest directing scientific research focus further highlights this new orientation (Stilwell, 2003). Yet Owen-Smith (2003) asserts a strong sense of opposition to exist among academics to the contradictory nature of commercial gain against scholarly endeavours. Similarly Palfreyman (1989) argues that entrepreneurialism or even increased commercialisation does not automatically undermine collegiality.

Commercialisation does provide some benefits to universities. American universities have established new networks and links to companies interested in new technologies and research expertise, which in turn brings revenue (Bok, 2003). Similarly government reviews in the UK have promoted such collaborations (Lambert Review, 2003). The global marketplace has also forced universities to not only ensure that their operations are financially viable but that a certain amount of quality management exists, in order to compete with other institutions worldwide (Harvey, 2002a; 2005; Srikanthan and Dalrymple, 2003).

The sector has realised that there is much to be gained from more commercial activities focusing on amassing new contracts and business in the form of research and consultation on behalf of large organisations seeking market research (Buchbinder, 1993). Conversely organisations have begun to identify the rewards that may arise through investing in intellectual property and links with world-class research departments in universities (Buchbinder, 1993; Deem *et al.*, 2008). New and first discoveries of technology, medicine and other disciplines provide not only prestige and membership in the research elite but often large financial rewards (Owen-Smith, 2003). HE is not only moving towards the domain of private enterprise but the private sector has realised the potential in HE. Owen-Smith (2003: p1099) argues that once the conflicts of interests between commercially sound research and traditional scholarly activities subsidies, there is inevitably a propensity for positive collaboration between the public and private sector to exist and “settle down into a positive feedback loop.”

Nonetheless issues arise with such new collaborative partnerships in the arena of ethics. Similar to issues with profitability in education, can new research and discoveries be reliably consulted in the midst of pressures exerted by external funders (Eustace, 1982). Perhaps there is no definitive way of ensuring that research activities under the commercial premises are totally free from bias and unethical pressure. To escape managerialism and commercial tendencies universities are required to find new forms of funding to enable autonomy but questioning the viability and integrity of external funding posits a return to the restraints of benchmarking and peer-reviewing procedures (*ibid*).

Commercialisation creates an environment of uncertainty brought about by the inability to ensure an unprejudiced approach to University management and decision-making – the allure of putting precedence on income over quality education. The literature suggests a balance between effective management of resources alongside ensuring the quality of education is the symbiosis that universities should aim for. Indeed as Owen-Smith (2003) states “failure to establish a joint trajectory in the period of transition” between commercial gains and scholarly alignment would create an organisational structure unable to embrace the potential of academic research linked with business and corporate connotations.

2.23 Commercialisation and structure

Other questions arise, for example are universities structures designed for such change? The ardently defensive, protective and territorial academic may not adhere to the new commercialisation of the traditional education ethos (Dearlove, 1995). The new academic (naïve to collegiality) may indeed subscribe to the manager-academic posts required to effectively operate within commercial HE. The growth of enterprise programmes and the ubiquitous MBA perhaps displays the big-spending nature of companies willing to invest in their management executives and the universities willingly accepting them (Butler, 2008). Without doubt there is learning in any university programme, yet the demise of traditional (and not longer financial viable) disciplines has given way to new programmes and courses that cater for the needs of the job market and the economy (Taylor and Macleod, 2004). This would be inevitable, as essentially it is the financial viability of programmes that keeps them afloat (Macleod, 2004). Seemingly when there is no longer a

considerable need or uptake for a programme it has met its end (BBC News, 2004) potentially disadvantaging learning (De Bruxelles and Owen, 2004).

Moreover can rigid structures of collegiality within more traditional universities be as accepting of these new commercially centred changes? The argument against the more unyielding and strong collegial decision making structures stands as its inability to be more flexible and open to change (oddly for a structure that promotes autonomy and freedom), much of the desired characteristics for commercial entities to benefit (Dearlove, 1995). Whereas Di Gregorio and Shane (2003) identify that commercial start-ups and frequency cannot be clearly attributed to university type. With empowerment and freedom perhaps come more capricious management and operations, which may or may not be viable for proactive action to environmental forces. Markman *et al.* (2008) and Morey (2004) cite a need for proactive management in the midst of current competition and commercial times advocating internal structures and leaders that are able to cope and affect the required changes.

While there is a plethora of literature arguing both for the financial and academic benefits that may arise from a more competitive and commercial sector for both universities and the student body (Buchbinder, 1993; Chapleo, 2006; Etzkowitz *et al.*, 2000; Markman *et al.*, 2008; Morey, 2004), it is difficult not to be anxious that HE is losing its foundations as a public good. Much like competitive pricing between supermarkets, the consumer may benefit, but does quality and along with that someone else in the supply chain (stakeholders) suffer at its expense?

The application of for-profit management in private sector organisations is clear and strived for, but its similar implementation within public institutions remains frowned upon with continued uncertainty on its detriments to society as large (Trow, 1999).

2.24 Students as customers

The proliferation of students deemed as customers of which university education is viewed as a service and product is terminology increasingly applied within UK HE and globally (Crawford, 1991; Hill, 1995). Onsmann (2008) discusses the changing paradigm where more focus is placed upon customer satisfaction and service quality as key for

marketplace success. Private sector benchmarking methodologies are increasingly applied in questionnaire and surveys administered to students in a bid to measure student satisfaction to improve recruitment, retention and keep customers satisfied (Douglas *et al.*, 2007).

Onsman (2008) highlights four key shifts that have led to consumerist culture:

- Change in constitution of the student population;
- Institutional changes in universities;
- Change in the nature of knowledge;
- The changing dynamics of students, universities and knowledge as a consequence.

Middlemiss (2000) highlights the inevitability of increasing demands from students alongside increases in tuition fees. HE is moving away from traditional notions and towards students demanding value for money (BBC News, 1999), which Turnbull *et al.* (2008: p19) view as the growth of 'litigious culture'. The premise of education as privilege has altered in favour of "paying students [being]... more likely to be assertive in what they want for their money" (Onsman, 2008: p78). This shift in the student population displays the changing mentality and desires of students' expectations of HE. Yet Crawford (1991) has highlighted the terminology of students as customers to exist pre-tuition fee implementation.

Onsman (2008) further discusses that changes have not solely emanated from students and governments externally but rather that universities have embraced this culture shift. Moreover there have been considerable increases and at times 'preference' to the enrolment of full fee paying students as opposed to subsidised and sponsored students (Onsman, 2008). The growth of distant learning and international collaborative partnerships overseas further emphasise the move towards education as business and students viewed as customers (Douglas *et al.*, 2007). This change has driven redesigns in institutional dynamics and structure to cater and react to new student wants.

The shift in focus in the generation of knowledge towards potential remunerative gains and a research academic's 'required' quota for yearly assessment further cement

Onsman's (2008) notion of the changing face of knowledge. The 'publish or perish' ultimatum reinforces the measure of research by quantity and rather less necessarily on quality (Angell, 1986; Tapper and Palfreyman, 1998).

Inevitably where these issues collide it creates an environment not only geared for change but perhaps conflict. The need for universities to provide education and learning may not meet students' expectations. Indeed universities increased marketing campaigns and supposed promises may inadvertently provide an avenue for students (now as customers) to demand what is deserved of the amounts of tuition fees paid (Chapleo, 2007). The inter-related dynamics of such change and commercial business culture and the view of students as customers may provide a more manageable outcomes-focused approach but would in turn need to provide what customers want (Onsman, 2008).

The subscription to business paradigms has altered and perhaps conceited the stronghold of academic integrity and excellence towards consumerist demands and so-called contractual agreements between student and university. In order to evade the stranglehold of these trends "each university has an obligation to provide what it says it will provide" (Onsman, 2008: p78) meeting its contractual agreements and striking a balance between student as customer and university as provider.

This inevitably highlights the shifts in university education towards not only extending this service quality 'agreement' to university students but also other related stakeholders (Turnbull *et al.*, 2008). Undeniably this brings new calls for accountability and scrutiny in university operations, module content and meeting quality assurance benchmarks.

2.25 History of universities in UK

The HE system in the UK stemmed from a dual system or model of approach with universities held as separate from post-secondary educational institutions (Chitty, 2004; Henkel, 2000). This system effectively demarcated the sector into dual groups of universities and non-universities offering research and learning in one and more vocationally linked teaching in the other.

The system was changed in the mid 1960s to cater for increasing demand and student numbers entering HE. The binary system came into existence to reduce the burden on traditional universities merging vocational colleges and smaller specialised institutions of learning into polytechnics (Halsey, 1979; Williams, 1992). To compensate for the ever-growing sector these polytechnics were established to provide more vocational and professional training teaching more practical and applied subject areas (Pollitt, 1996). Not restrained by traditional university management and structures these institutions were under government control and were seen to provide basic education to the public at large, where universities would continue to undertake research and possess degree awarding powers (Gray, 1989; Halsey, 1979; Henkel, 2000). Similarly Gray (1989) highlights their assimilated organisational concept of highly structured administrative management alongside scholarly rigours, which were developed by their then university mentors. This equated to better monitoring and supervision of courses and their respective standards.

Another factor for the creation of the binary system was the bid to improve access to HE through increased availability of part-time and sandwich courses (Williams, 1992). Polytechnics and the binary system of education is as Kyvik (2004) argues a means for government to not only improve access to its less privilege populous but to cater to the needs of the “labour market and strengthen regional economies” (*ibid*, p399).

Inevitably with the growth in the HE sector in the UK came increased competition for funding and student numbers. Polytechnics charged with providing vocational education to the masses were growing, maturing and on the verge of entering the domain of the traditional university (Gray, 1989; Morgan, 2004). The improved quality and even new degree awarding powers together with cutting edge research focuses meant that not only was the sector changing but that polytechnics were no longer willing to remain second to universities (Pollitt, 1996). A position viewed as inferior to universities amidst dated notions as non-serious alternatives to HE as perceived by traditional university ‘dons’ (Halsey, 1979). Perhaps the lucrative opportunities that exist in providing university standard education alongside research and learning enticed polytechnics to venture and stretch their abilities. Inevitably competition within the sector increased as institutions grew. Nonetheless the sector as a whole was seen to be becoming more uniform and generic as universities themselves commenced more modular training and vocational courses. This was perhaps reflective of the State agenda as universities and polytechnics

were homogenised into a uniform sector (Eustace, 1982). Seemingly the activities of both universities and polytechnics were converging with universities interested in vocational training and polytechnics increasingly conducting research – similarities increased and differences were becoming less evident.

Then came the unified system of HE within the UK. The Further and Higher Education Act of 1992 transformed the sector from that of universities and polytechnics into one ‘unified’ system of HE. Former polytechnics were given the right to title themselves universities and provided with degree awarding powers (Tomlinson, 2005). In a bid to create a balanced and equitable sector, the then government sought to simplify HE funding and supervision. Notwithstanding polytechnics, which were traditionally less prone to research with structures more akin to the private sector, fell behind the already established universities (Turnbull *et al.*, 2008).

The establishment of a unified system of HE within the UK provided an easier means of governing quality in the different HEIs. The uniform system was aimed at providing an equal playing field for all institutions adhering to a generic set of benchmarks and quotas as set by government. Yet as Kyvik (2004) suggests a unified system unwittingly creates opportunities for unfair advantage and elitism, as hierarchies of institutions may come to exist (perhaps as evident in collaborative university groups (discussed in chapter 2.21). Moreover this further highlights that while polytechnics are essentially deemed equal to universities their young and perhaps inexperienced background is at a significant disadvantage to the more historically research intensive universities that command considerable research grants and funding (Lomas, 2004). Yet there is still strong backing by academics (from both old and new universities) towards the unified approach of UK HE (Kyvik, 2004).

The sector is increasingly becoming more commercialised and with that changing demands from changing student demographics. Whether a unified system can cope with the new demands is yet to be seen, but it is clear that commerce, and new requirements of society will fuel politics, which in turn will drive the management of HE (Jarvis, 2001). In an arena of increased competition along not dissimilar institutions the utilisation of a unified system may create more benefits for its potential and current students, diversifying and catering to new needs socially, economically and within the job market

(Buchbinder, 1993). However with increased scrutiny of operational and financial effectiveness alongside declining government funding, the issue is not *if* the system will work, it is whether the system will remain effective when stretched.

Bleiklie and Kogan (2007: p20) highlight significant changes in university management and structure to emanate from a number of key issues:

- Increased control and prioritisation of central government and authorities in the determination of university objectives and goals affected through national funding systems, macro steering mechanisms and performance assessments;
- Proliferation of managerial ideologies and administration diminishing academic leadership and structures. Increased integration of previous university governance into more administrative lines and focus;
- Replacement of traditional academically dominated senates replaced by boards or trustees from more corporate backgrounds seen as perhaps a dilution of academic steering;
- Realignment of previous academic heads and seniors into more corporately orientated positions focusing more so on goal achievement and management by objectives.

Moreover new worries of diminishing student numbers (Hackett, 2006) even amidst improved quality control measures and quantitative evaluation of university performance signal perhaps an overly mechanical and quantified approach of orientation and management within HE today.

Nonetheless universities are often viewed as complex organisations and are often viewed as institutions where academics can pursue self-motivated goals and individual freedoms of inquiry having both a traditional and modern structure geared for academia (Dearlove, 1995). Similarly academics are grouped by their disciplines and respectively faculties that in themselves are managed based on their own collective affairs. Universities and their academics value strongly their basic autonomous positions but, to some degree, as Dearlove (1995: p 166) states “creative consent organizations need leadership.”

2.27 Traditional universities

2.27a Ancient universities

Ancient universities are universities created under Royal Charter within the UK. These are the oldest universities within the UK and have existed for over 100 years. Seen and regarded as centres of excellence and scholarly debate these universities were held to promote quality in learning and teaching as well as research (Macfarlane, 2007). Within long and distinguished histories these institutions have contributed and disseminated social contributions in the form of advancing understanding and research discoveries. Within a list of famous and well-recognised alumni these institutions are seen to be the 'ivory towers' of education, involved highly with the creation of new knowledge and academically centred (Etzkowitz *et al.*, 2000). Governed by collegiality and scholarly autonomy these institutions pride themselves on remaining true to the fundamentals of teaching and learning, focusing on the intrinsic benefits that education can provide rather than operational profits (Macfarlane, 2007; Tapper and Palfreyman, 1998; 2002). A view espoused by Ashby (1967) as the cultivation of gentlemen rather than scholars in his understanding of student-tutor relationship that exist in ancient universities. Yet Gray (1989) adds that such institutions can and do range in their application of management practices which can vary from authoritative or unpredictable to highly collegial and facilitative, echoing Tapper and Palfreyman (1998) who cite ancient universities in Scotland to be more egalitarian in their approaches to students, embracing of professional training and lecture centred focus.

2.27b Red brick universities

The term Redbrick was first used by Truscott (1943 cited in Kok *et al.*, 2008) to describe the materials used to build the University of Liverpool. The red clay used to build the university was symbolic of many of the universities in this era. Universities established in the early 1900s were classified as Red brick universities. These, similar to ancient universities, were seen as institutions focused on research and scholarly discovery. Eustace (1987) considers this typology to not differ substantially in its members drive for scholarly integrity and expertise alongside its ancient university counterparts. Halsey (1979) views red brick universities as created within and as a product of major provincial industrial cities growing in prominence and dominance between the wars.

2.27c Plate glass universities

Plate glass universities are institutions established in the 1960s following the Robbins Report of 1963. The architecture of the buildings in this era consisted mainly of glass, hence the term plate glass, which was first used by Beldoff (1968; Dixon, 2006; Kok *et al.*, 2008; Tapper and Palfreyman, 1998; Tapper, 1998). Examination of differences in opinion and perceptions of staff members in this university typology would enable a more reflective review of the sector. Moreover as this study seeks to examine the sector away from the traditional binary divide of old and new universities, only through including plate glass institutions would all typologies be sufficiently considered.

2.27d New universities

New universities were created from former polytechnics through an Act of Parliament. The Further and Higher Education Act of 1992 enabled polytechnics to call themselves universities. These former polytechnics were traditionally under Local Educational Authority (LEA) control and were run under a more business-like structure as compared to ancient universities (Chitty, 2004; Deem, 2004; Eustace, 1982; Kok *et al.*, 2008, Shattock, 2006). Their origins as former polytechnic institutions meant a background of more intensive teaching and mass education, focusing on newer, non-traditional disciplines (Ackroyd and Ackroyd, 1999; Deem, 2006). Created to reduce the burden and stress of increased student numbers and the needs of the job market these institutions were often seen as less research focused and more education of the masses (Henkel, 2000). A recurrent stigma was a considerably more humble research expertise and maturity as compared to traditional universities.

Nonetheless new universities (from their origins as more bureaucratic and managed institutions) exhibit high levels of productivity and managerial sense (Gray, 1989) providing a structure well catered to respond to the changing and commercialising education sector amidst increasing financial difficulties and limitations. As former polytechnics, Gray (1989: p123) notes their “greater unity of purpose and control than in almost any university department.” Their inherent structure enables quick decision-making and a proactive management approach akin to more corporate endeavours and as

such more compatible with the new revenue minded foci. This assessment is supported by Deem (2004; 2008) in her funded empirical research.

2.28 Management structures

Within UK universities exist a diverse range of management structures. Some are built along traditional notions of academic focus and autonomy where others concentrate on ensuring effectiveness and efficiency either through the promotion of increased bureaucracy or more scrutinize management.

This section focuses on six main HE management structures, which that have been utilised in universities.

2.28a Collegiality

The collegial school of thought focuses on the promotion of scholarly excellence and freedoms building on what were seen as traditional formations of university hierarchy and foundation. This management style is essentially governed by academics for the benefit of the academics and academia (Harvey, 1995 cited in Davies *et al.*, 2007; Peters, 1992) with “members of a collegial body... presumed to be equals” (Birnbaum, 1988: p89). The approach focuses less on financial and monetary issues and more so on research, scholarly inquiry and dissemination of knowledge with notions of academic autonomy as its core, embracing “shared sentiments and values as the general purposes of the organisation” (Birnbaum, 1988: p91). The collegiate university operates under consensual decision-making and democracy of discourse and debate within roughly “professional equals” (Dearlove, 1998: p68).

The term is viewed with both physical and functional dimensions with the latter mentioned above. Tapper and Palfreyman (1998) highlight that within a physical context, collegiality is viewed as buildings and colleges as small academic communities housing academics and students cumulatively established into a central university or a more confederate model of governance.

Seen as the optimum and preferred management structure within universities collegiality allows for academic freedom and autonomy, promoting excellence in teaching and learning (Barnett, 1993; Buchbinder, 1993). Being less rigid, it further allows for better discourse and discussion among learned individuals within the university to voice their opinions in hope of improvements towards the good of the university itself and its community (Eustace, 1987). Perhaps seen as bottom heavy (Dearlove, 1998) the approach enabled communication of issues bottom-up allowing voicing of thoughts and a more tolerant form of self-management. The collegial structure builds upon a working environment of sharing, trust and participation in providing empowerment and emancipation to people in their organisation and the conducting of their work (Smyth, 1989).

Unfortunately collegiality does have limitations. Academics have argued that at its heart is a structure that is old-fashioned and slow, unable to adapt to changing times and shift accordingly to societal demands (Bergquist, 1992; Buchbinder, 1993). Moreover its management by academics, while promoting worthwhile participation, is lengthy and protracted in its ability to make decisions when required and quickly. Gray (1989: p124) summed up the ideology of academics within institutions as “had universities been functioning in a more realistic economic and social environment, they may well not have been so pre-occupied as to be unable to pay attention to what was happening in other organisations.”

Eustace (1987: p15) demonstrates this further in Lord Annan’s words as former Provost of King’s College, Cambridge and of University College, London.

“For 14 years I tried to get the Schools of the University of London to rationalise academic resources... no action was ever taken.”

Similarly Dearlove (1995: p166) argues that collegial ideologies can descend into single-mindedness focusing on the “self pursuit of individual and departmental interests.” Moreover he highlights that autonomous scholars are continually ignorant and unaware of the external forces and realities that affect their institution but instead care more so with furthering a career dedicated to research with independence and institutional mobility. Tapper and Palfreyman (1998: p148) indicate dissent and an undercurrent of “seething

cauldrons” within the collegial methodology owing to strong rivalries and jealousies between colleges and academics, dislike for pooled and redistributed incomes for the betterment of the collegial system as a whole, and the unobserved internal competition for students.

Yet as Smyth (1989: p152) argues “collegial judgements based on historically and politically constructed social nature of knowledge, are no less rigorous than highly quantitative, authoritarian, and impositional forms of knowledge.”

The modern environment with its continued variability and volatility poses a potential threat to the traditional collegial university structure. The need for efficient decision making without drawn-out consultation periods to counteract and meet the new needs as depicted by the external environment mean that collegiality has to compromise (Dearlove, 2002). Moreover as a product of dominant collegial culture “decreased faculty mobility” and entry of new members create stagnation as familiar and overly similar groups govern with little outsider contribution (Bergquist, 1992: p52). This practice seems to be further compounded, as selectivity in such membership has often been undertaken with self created criteria and measures of merit (Gray, 1989). Birnbaum (1988: p91) further indicates that for true collegial form to exist, it must be “comparatively small.”

Bergquist (1992: p17) argues that collegiality at its heart contains relationships that “are informal, non-hierarchical, and long term” highlighting leadership and organisational management to emanate from committee and groups or autonomous academic activities. In essence, collegiality sought to promote the improvement of young minds alongside the fostering of faith and allegiance not to a particular institution or tangible goal but to the idea of learning and development.

Bergquist (*ibid*) identifies three major characteristics of collegiality:

- The development of young minds rather than career aspirations;
- The need for residential living and participation in activities to foster community; and
- The constant emphasis on complexity of thought and the education process rather than specific body of knowledge.

Collegial management styles view academic freedom and independent work as utmost promoting individualism creating what Millett (1962 quoted in Bergquist 1992: p43) called “an environment of learning, not a product of learning”.

While there is little doubt that collegiality encompasses what is seen to be the ideal university management structure the question of its viability remains. Dearlove (1995) argues that collegial management is slow and conservative and similarly indifferent to wider concerns. While the traditional university may be able to adhere to the collegiate management of yesteryear, newer universities with considerably less funding and recognition may not be able to afford to remain stubborn and defiant. Undeniably the need to ensure academe and autonomy is key to the traditional university in the modern day (Barnett, 1993), but it is equally important (as institutions of learning) that universities react and assimilate to what are the changing needs of its student customers (Eustace, 1987). Indeed collegiality has its place in modern university management.

“Where people think and act collegially there is a fundamental and shared commitment to recovering the joint assumptions and perspectives they hold to be true about the nature of their work which binds them together in that work.”

(Smyth, 1989: p152)

It is this ideology that constitutes the collegial structure and its survival within universities, where scholarly integrity and the creation of knowledge remain the prime foci. This collective drive and singularity of ideology enables the “quasi-political, committee-based, faculty-controlled governance process” (Bergquist, 1992: p46) to operate in tandem with the aims of the institution. This democracy allows for freedoms and autonomous empowerment with accountability judged by peers rather than formalised procedures. Indeed Bergquist (*ibid*) highlights the collaborative nature of collegiality in his discussion of evolutionary change, which is transitional in nature enabling better acceptance of changes with less abrupt and large shifts in management objectives (see figure 2.6). Similarly he further comments that evolutionary changes within the collegial paradigm are slow and progressive with an added drawback that initial direction and movement can be lost. Dearlove (1995: p167) adds that collegial models “provides scope of impoverished leadership” unable to adequately affect change

or securing a commitment to change. Nonetheless it is key to understanding the fundamental foundations of university management and its links and sentiment towards collegiality and the autonomous conditions it provides for academic activities and focus alongside its rigid avoidance for strict models of management and administration (Fear and Doberneck, 2004; Holman, 2000).

Figure 2.6 Evolutionary Change

2.28b Bureaucracy

Bureaucratic structures focus greatly on ensuring that the appropriate documentation and red-tape is effectively applied to university management (Kreitner, 2002). The need to ensure accountability and clear lines of authority and fault is central to bureaucratic structures (Birnbaum, 1988). Clear documentation and paperwork together with adherence to departmental rules enables a coherent delegation of responsibility and blame. Its application, while seemingly excessive, promotes meticulousness in the workplace, ensuring adequate administrative duties and protocols are met (*ibid*). Smyth (1989: p146) observes this management structure as one “which espouse[s] a disinterested view” and relies on “principles of technical competency, hierarchy and rule following.”

Birnbaum (1988) understands the bureaucratic model as containing clear organisational charts, which should be taken seriously. Moreover he highlights that while some of the practices within bureaucratic structures are utilised within universities, the complexity and size of institutions often pose a considerable issue. Similarly, Birnbaum (1988 in Bergquist, 1992) views bureaucratic structures as conscious attempts to “relate explicitly means to ends, plans and the allocation of resources to institutional objectives, goals to mission statements”. Moreover the model avers ‘seniority’ and the ‘chains of command’ providing a structured management hierarchy (Jamali, 2005; Liu and Dubinsky, 2000; Middlehurst, 2004) with perhaps over-emphasis on box ticking (Kok *et al.*, 2008).

In the modern arena of increased accountability and new requirements to ensure effective usage of both private and public funds, bureaucratic structures provide a means to supervise academics. Establishment of protocols alongside chains of command promotes a highly structured and governed university management style thus ensuring quality and quantity of work meets required levels (Kok *et al.*, 2008; Liu and Dubinsky, 2000; Middlehurst, 2004). Moreover it enables definitive allocation of blame and traceability of fault allowing for swift remedy and potential discipline (Kok *et al.*, 2008). The approach asserts formal authority and seeks to align or organise university operations and academic work into highly structured hierarchies or order. Dearlove (1998: p72) highlights the incompatibility of this structure with the “anti-bureaucratic and hostile” notions within professional organisations.

Dearlove (1995: p166) further highlights the weakness of application of bureaucratic powers and administration, which are likely to fail “without support and action at the bottom.” Indeed Raelin (1986 cited in Dearlove, 2002) argues bureaucracy’s incompatibility with any organisation where approval is based upon the consent of its professional members. Similarly Dearlove (2002: p266) iterates “universities are traditional bottom heavy with solid professional authority held by academics.”

2.28c Managerial

Managerial models focus strongly on ensuring adequately and proper management within universities. It promotes clear chains of authority and hierarchy further promoting the use of managers and heads to develop and ensure effective operation (Kok *et al.*, 2008). The

managerial model contains characteristics of the bureaucratic model but focuses on effective management of human resources, finance and other departmental operations (Deem and Brehony, 2005). It aims to scrutinise while at the same time productively control both academic and administrative departments. Its central application is on meeting standards of university administration and organisation advocating management control and devolved authority from academics to managers (Denman, 2005; Grey *et al.*, 1996; Holman, 2000; Lawler and Hearn, 1995).

Utilising techniques drawn from the corporate sector managerial models within universities centre less so on academic quality and more so on meeting quality benchmarks and targets alongside set protocols and quotas (Deem, 2006; Deem and Brehony, 2005). It looks to manage people through a mix of techniques to promote efficiency, effectiveness and economy (3Es) (Dixon *et al.*, 1998; Gordon, 2003). Managerial structures usually consist of empowered managers or departmental heads that, while themselves have authority, answer to higher level senior staff. An observation that Bergquist (1992: p84) highlights through increased emphasis by staff believing “that one becomes more influential by moving up through formal lines of authority.”

It seeks to create a highly centralised hierarchically controlled system that utilises indicators of performance to achieve set objectives and policies, blurring the lines of distinction between private and public organisations (Smyth, 1989). Dearlove (1998: p68) interprets this management structure as one that is keen to assert “top down authority by the vice-chancellor and the senior management team of academic managers and full-time administrators.” Managerial orientation seeks to control and “assert the rights of management” over the academic process in a bid to realise central goals of efficiency, effectiveness and economy, built upon the techniques popularised by Tayloristic tendencies (Smyth, 1989).

In essence managerial models create avenues for additional hierarchies within institutions, which could be founded upon similarity of functions or levels of authority differing to the flatter structures of collegially based models (Bergquist, 1992). The model is predicated on ensuring good management through delivering economy, efficiency and effectiveness, and utilisation of private sector ideals to achieve this end (Randle and Brady, 1997a: Metcalf and Richards, 1987).

Nonetheless the approach differs ideologically with the needs and focus of “the peculiar nature of academic work” (Dearlove, 1998: p68) seeking to quantify benchmarks of success and management prerogative onto the qualitative self-governed autonomy of academe (Birnbaum, 1988). The shift in importance of academic excellence towards consumer sovereignty and economic rationalisation are indicators of managerial tendency (Smyth, 1989). Moreover the managerial model overly focuses on top-down management subverting faculty participation and discussion, elements highly sought after by academics (Dearlove, 1995).

Bergquist (1992) views managerial culture as one where educational outcomes are clear and specified with criteria for performance appraisals and assessments. Senior staff or faculty leaders were charged with management of personnel and fiscal performance with prominence and influence provided to administrative positions. Managerial management styles view the “act of instructional design [as]... separated from the act of teaching” (*ibid*: p58). It promotes a culture of attentiveness to the achievement of objectives, set parameters and operates teaching under instructional materials most probably prepared by someone else, aiming to sequence autonomy.

The approach may create clear guidelines and mission orientation by management objectives yet Bergquist (*ibid*) argues managerial cultures tend to seem lifeless causing institutions to become repressive and uninspired places to work, often exacerbated by financial problems. Managerial models demand accountability and cost containment moving away from the laissez faire collegial model that ancient universities practice. Ultimately the model is predicated on more stringent adherence to management culture with increased emphasis on competent administration and management leadership (Kok *et al.*, 2008). The crux of managerial management styles is ensuring skilful management of people alongside effective usage and costing of resources, with “apparent indifference to the individual welfare of faculty members” (Bergquist, 1992: p102).

2.28d Discipline based

The discipline based model differs from other models in that it focuses of management structure that promote the wants of the university and its stakeholders (Healey, 2000). This structure emphasises and enables the drive towards scholarly research and learning

and differs from collegiate management in that it holds no rigid structure of academics governing academics (Gibbons, 2005; Kok *et al.*, 2008).

This structure is highly acceptable by traditional and older universities in its intrinsic ability and focus that adheres to the socially contributive needs of universities. The model is reflective of Bergquist's (1992) developmental culture in its approach to amalgamate collegial understanding towards more focused coherence and application. Collegial structures and their loosely coupled orientations tend to remain relatively indifferent and at times slow to react to changing environmental forces. Bergquist's (*ibid*) developmental culture highlights a new required understanding, under changing financial and modern restrictive forces, to become more deliberate in the planning and development within university management. He avers rationality and the coming together of procedures and organisation to benefit and meet the end needs and goals of the institution.

The discipline based model creates an arena of internal development fostering improvements in course delivery, staff and student development and an overall aim to remedy the fallacies of overly autonomous structures (Healey, 2000). This internal development was aimed at improving institutional capabilities in order to effectively meet the needs of the institution's goals and objectives, while retaining academic excellence. Similarly Bergquist (1992) highlights that leaders within the model seek to influence and suggest change diplomatically, rather than undertaking direct, overriding control.

There have been arguments that the developmental culture that exists within discipline based models is quasi-hybrid in its reflection of collegial understanding under managerial tendencies (*ibid*). The 'healing' nature of unity between disparate models bridges the gap between the needs of students, faculty and administrators with the needs and aims of the institution at large.

While providing clarity and direction, the transparency of approaches can be easily negated by the 'alienation' of faculty members, who believe and adhere otherwise, clearly demarcation of advocates and critics. Indeed Becher (1994) and Jenkins (1996) highlight the high probability of differing educational disciplines as academics retain strong allegiance to their respective subjects or professions, rather than subscribe to central disciplines.

Nonetheless Bergquist (1992) highlights the three main aspects of developmental culture within the discipline based model:

- Teaching and learning becoming the heart of institutional aspect rather than research or scholarly activities, advocating more practical, problem-solving curriculum developments;
- Personal and organisational dynamics orientated toward corporate paradigms of planning and rational approaches to course development, improved inclusiveness and an emphasis on conflict resolution;
- Questioning of institutional missions to ensure adherence of activities and objectives in meeting these goals.

2.28e Political organisational pattern.

This management structure essentially enables negotiation between different levels and staff members at universities (Becher, 1984). Pfeffer (1981, cited in Birnbaum, 1988: p132) views this pattern as a form of “acquiring, developing and using power to obtain preferred outcomes in situations” with strong negotiations and debate conducted in a bid to achieve “desired outcomes”. The model promotes effective participation of members of the university allowing forums for debate and opinions to be heard (Becher, 1984; Birnbaum, 1988). Unfortunately whilst discussion and suggestions are multi-level, senior management (or groups with stronger prominence and power) have the ultimate say and decision-making privileges (Birnbaum, 1988; Kok *et al.*, 2008; Sullivan, 2005).

This structure benefits universities through its approach, which allows dialogue and participative contribution by its members building strong loyalties (Birnbaum, 1988). Its empowerment of upper management, although providing them with the power to overrule, enables quicker decision making while simultaneously considering feedback and other points of view. It builds more so on informal politics as opposed to formal processes towards management (Dearlove, 1995).

The approach is reflective of Bergquist’s (1992) negotiating culture, which similarly highlights collective bargaining seeking change and achievement of objectives through confrontation between faculty members. In order for negotiating culture or political

organisational patterns to exist and effect change there requires consensus among a majority of staff members (Kezar and Eckel, 2002) developing coalitions through trade-offs and compromises (Birnbaum, 1988). As negotiation and bargaining are key elements of this model, there is a need for change specified and generated unanimously by the staff body or stakeholders affected (Bergquist, 1992; Birnbaum, 1988). Carr and Van Eyck (1973) discuss that negotiation is at its most effective where common goals (most likely to improve working conditions) in favour by the majority create sufficient authority and power to confront and enact change. It is also important to highlight that the authors identify this confrontation to exist both against over zealous administrative management and excessively dominant academics (*ibid*). Indeed Becher (1984) and Dearlove (1995) acknowledge this perspective of politically structured organisations identifying the importance of conflict and discourse between interest groups vying for power. Moreover Bergquist (1992: p137) highlights that the model grew out of a reaction to dominant forces but further reminds:

“They are fighting against different adversaries and in many ways have more in common in adversarial culture than with each other.”

Indeed Bergquist (*ibid*) highlights this conflict to lie between old traditionalists with strong allegiance to hierarchical powers and younger staff members ready to confront and negotiate fairer and perhaps more consistent practices. This is substantiated by his identification of values that dominate the political organisational pattern of negotiation – the need for policies and procedures to be fair and equal; and egalitarian approaches alongside academic freedom.

2.28f Organised anarchy

This structure builds upon Cohen *et al.*'s (1974) garbage can approach. The approach avers a mix of structures and hierarchies that best fits the organisation. The term garbage-can essentially exemplifies this approach to university management, consisting of a hodgepodge of different styles that exist out of the needs of the university. The various structures vary between departments and faculties evolving and changing to work most effectively in its respective environments, ultimately operating in tandem (Birnbaum, 1988). Intrinsic in this structure is not a prescribed hierarchy or management style but

rather an evolution and coming together of numerous approaches functioning cooperatively with one another (Dearlove, 1995). The approach is based on the assumption that individual methods for scholarly excellence of teaching and research creates a “diffusion of responsibility and a proliferation of centres of excellence” (Dearlove, 1995: p165) leading to a varied and as such diverse structure that is tough to centrally manage.

The approach allows harmony in departmentalisation and in looser structures as it enables freedom for management styles to generate into what best fits individual needs while collaborating to match the needs of the organisation as a whole (Sullivan, 2000; Weick, 1976). While there is no doubt that the structure’s autonomous and liberal approach can both benefit its staff members and the organisation its loose and indefinite formation can create ambiguity in the chains of command, delegation and empowerment (Birnbaum, 1988). The lack of clear structure and in turn accountability allows an overly relaxed approach to university management (Dearlove, 1995; Weick, 1976). Moreover the system is at times viewed as “ambiguous guides to nothing” (Dearlove, 1995: p165) brought about by an overload of suggestions and solutions introduced into the mix as “nothing turns out quite as planned.” Undeniably the approach pleases its working members, and with a content workforce perhaps comes increased productivity. Yet the issue of its feasibility in the ever changing and volatile commercial world of higher education is that it does not contain sufficient impetus, pro-activeness and a structure balanced enough to react to changes in the sector. It may at times be seen as a dated approach consisting of an assortment and random collection of different management styles unable to unite when needed. Indeed Dearlove (1998: p72) trivially explains that the approach is one where “no one is really in charge and pretty much anything can happen given the weakness of the centre in combination with the scope for autonomy action low down in the system.”

Birnbaum (1988) highlights that this structure is more commonly applied to large and more complex institutions that contain a diverse mix of program units, staff and student bodies. He defines organised anarchies as characteristically containing problematic goals, unclear technology and fluid participation (*ibid*: p154). Indeed he posits that the anarchical approach is predicated on a strategy that groups, assembles and absorbs programmes and methods that create order out of chaos (*ibid*). The *ad hoc* approach to university management embodies the garbage can ideology of Cohen *et al.* (1972), yet

similarly Birnbaum (1988) recognises the existence of more permanent structures within the approach as evidenced by academic senates and management groups.

2.29 Debate on structure

University structure and design vary with age of institution and its provenance. Traditionally universities tend to contain a more eclectic structural mix mainly as a product of their age and autonomous design. Focused on ensuring academic excellence ancient universities were built around academia and management by academics. They centred strongly on ensuring scholarly integrity and scholarly led programmes of studies. Power and control were strongly devolved to academics with less emphasis on management but rather on autonomy in research (Chitty, 2004; Gray, 1989; Henkel, 2000). The empowered approach to ancient university structures highlight its focus upon more liberal and traditional notions of education, viewing administrative and bureaucratic activities as secondary (Gray, 1989).

There is considerable emulation between the different university types in terms of structure. Collegiality's constituent parts are utilised by many universities in a bid to improve and emulate scholarly excellence prized in many older traditional collegial universities (Kok *et al.*, 2008).

New universities which are themselves based upon more managed and bureaucratic structures as a product of previous local authority control can perhaps identify with both the need to remain financial aware while endeavouring to attain academic and scholarly orientation (Gray, 1989; Henkel, 2000). As former polytechnics, new universities further exhibit strong cohesion and value placed upon teaching quality, alongside more collective understanding of institutions goals (perhaps a product of constant reinforcement by management) (Gray, 1989). Gray (*ibid*) recognises the cohesion, unity and alignment towards institutional goals and the encouragement to work in teams that exist as part of former polytechnic structure as opposed to singular and disconnected components that exist in traditional universities. Moreover Rosa *et al.* (2006) and Turnbull *et al.* (2008) recognise the ability for newer institutions to more amiably implement quality processes as opposed to more established academic values and norms that exist in older universities.

Bergquist (1992) argues that perhaps collegial management, while fruitful in its focus on scholarly autonomy and rationality of importance placed on thought and discourse, requires some form of modernisation. While he highlights organisational development as a key tool in altering current paradigms and management cultures that prevail and are rigid within the university setting, Bergquist is also quick to recognise that these are “often blocked by financial realities” (*ibid*: p170). Yet Greenwood *et al.* (1999) are keen to highlight the ability of mixed demands to combine into legitimate forms of collegial organisation.

While each structure holds somewhat distinct techniques and characteristics perhaps in the modern context of HE management a unity or hybrid of such approaches would prove most advantageous. Birnbaum (1988: p179) acknowledged the potential cybernetic ability of structures to coalesce and merged to ensure “spontaneous corrective action” to meet organisational needs. Syrett *et al.* (1997) identified a merging of academic structures and management styles to utilise what fits best within individual institutions. A view agreed upon by Bergquist (1992) as he argues for active engagement of all structures and cultural paradigms to meet this end. Ambos *et al.* (2008: p1428) similarly highlight the need for perhaps dual structures that would “allow the different and conflicting demands to be managed at the same time.” Etzkowitz *et al.* (2000) examine the potential of the triple helix model of university-industry-government relations with interaction between the three groups seeking to amalgamate the benefits that each can offer towards more synergised alliances. Owen-Smith (2003) similarly identifies a coalescing of structures and organisational motives as research for knowledge dissemination and industry reach a new ‘hybrid order’ requiring success not only in one arena but where excellence in one affects the other.

Sprunger and Bergquist (1978: p336) and Bergquist (1992) highlight that any shift in organisational dynamics to take the form of a ‘Change Curve’ (see figure 2.7 below).

Figure 2.7 The Change Curve

Nonetheless Owen-Smith and Powell (2001) highlight a disparity and variance to lie less so with organisational dynamics but rather within individuals themselves. They posit that ‘new-school’ staff differ in their orientation and acceptance of change more accommodating to entrepreneurial aligning as compared to traditional ‘old-school’ members (*ibid*; Ambos *et al.*, 2008) who fear to alter current paradigms and systems (Markides, 2007).

Watson and Johnson (1972 cited in Bergquist, 1992) identify structural changes to exist when a major shift in organisational pattern occur. They highlight modifications in the “organisational chart, the reward system, and institutional policies and procedures” (*ibid*: p188) as clear indicators of such change. Indeed changes in management require realignment or new orientation to new structures, processes and attitude.

Bergquist (1992) identifies the strengths and weaknesses that exist as a product of structural, process and attitude changes within universities (see table 2.8 below)

Table 2.8 The strengths and weaknesses as a product of change in universities.

Moreover Antonacopoulou (2006) and Fiol and Lyles (1985) agree that ultimately for any organisational transition or learning to actively operate requires learning on the part of individuals. They argue that organisations and indeed universities can and do develop based upon “files, rules, roles, routines, procedures” that inhibit and react with cultures and structures culminating in “shared mental models, values and behaviours, which constitute part of the organisational memory” (Antonacopoulou, 2006: p456).

Ultimately as Etzkowitz *et al.* (2000: p329) note “it is more likely given the dynamic, competitive nature of technology development in a global economy that there will be continuous invention of new roles and relationships for static institutions” where a state of continuous transition rather than an assumed fixed point exists.

2.30 Conflicting Ideologies?

The assimilation of more business-like styles and goals of profitability and sustainability into university management is diametrically opposite to the principal ethos of educating and disseminating knowledge. The drive towards profit-centred management and education increasingly being seen as a product with students as customers (Onsman, 2008) conflicts with the welfarist and neo-liberal notion of learning as a social contribution. Education in its welfarist form views learning as beneficial to society with less emphasis on the cost-effectiveness and profitability concerns that may arise in its operation. While education can reap economic benefits and improve social wellbeing, its operations centred on profitability are an issue of concern (Bok, 2003; Mohrman *et al.*, 2008). Are teaching and learning becoming secondary activities behind financial security and budgetary restrictions? This question does not lie solely with worries of the quality of teaching. The value structures that exist with impartial research and knowledge dissemination are increasingly challenged as “capitalisation of knowledge” (Etzkowitz, 1998: p824) rather than its discovery as extensions as public good (Ambos *et al.*, 2008; Etzkowitz *et al.*, 2000).

Alongside this, performance benchmarks are increasingly being promoted by university management opting in favour of the quantitative quality indicators of student pass rates and research publications. The rigidity of such approaches not only impedes academics from freedoms of scholarly enquiry but also shifts focus onto meeting targets (Mohrman *et al.*, 2008). These new assimilated paradigms challenge not only traditional university functions and ethos but create a conflict of interest as quality ‘box-ticking’ takes precedence over academic activities fuelling the deterioration of academic autonomy towards education that is financially viable (Kok *et al.*, 2008). Will the traditional academic pillars and ethos survive these seemingly unavoidable structural shifts and reforms?

These academic traditional structures have, to some degree, been weathered by the marketisation and increased competition of the sector. Prestigious research funding and recognition, which equates to academic status and university league table standings (Henkel, 2000) (supposed indicators of quality associated with improved student enrolment) can no longer be taken for granted by the autonomous collegial university.

Randle and Brady (1997b) highlight a considerable conflict in the paradigms of the professional and professions, where university lecturers operate under 'uniquely ethical occupations' providing a socially altruistic service to individuals (see table 2.9). This didactic impetus within HE contradicts growing concerns over public accountability and financial balancing.

“These represent a ‘public service ethic’ where the prime concern is to provide ‘quality educational opportunities for students’ and where the emphases on business systems and efficiency is alien to many”

(Dearing, 1994 quoted in Randle and Brady, 1997b: p231)

The changing power dynamics of administrative precedence over traditional academic autonomy indicates a shift within institutional relationships and intangible hierarchies. The shift in favour of management tact and managerialistic goals of increased productivity (Randle and Brady, 1997b) has introduced both the decline of professional (academic) control and the dilution of educational values. These is inevitably differences in public and private sector service orientation within universities (see table 2.10)

Moreover ideological shifts from lecturer/student as a mutual relationship each carrying its own inert responsibilities towards that of supplier/customer clashes with the notional goals of education. The modification of mutual endeavours to learning into consumerist demands highlights the marketisation of academe and contrasting perceptions of education as socially beneficial to that of education as product (Randle and Brady, 1997b).

Indeed this contrast has led to:

- The dilution of the quality of the teaching provision;
- The lowering of academic standards;
- The deterioration of pay and conditions; and
- The erosion of professional status (Wilson, 1991 cited in Randle and Brady, 1997b: p134).

Table 2.9 Conflicting Professional and Managerial Paradigms

Perhaps this is best summated with Dearlove's (1998: p59) opinion of the changing times:

“...management, bureaucracy and governance can only take universities so far in the organisation of teaching and research in turbulent times that call for change and entrepreneurship.”

Undeniably the literature indicates both negative and positive perspectives and spin on these changes within HE, but what is also evident is that there exist fallacies in both. The ultimate need is to ensure that a balance is achieved amidst the complexity, with institutions that are well governed and adaptive to implementing mechanisms as a product of change (Dearlove, 1998).

Luoma (2006) posits that under changing global competitive complexities any organisation requires managers that can run and lead their institutions and react to the existing dynamism and apply new logic. The author defends the application of management development and ideologies to combat environmental forces that created, as part of “globalisation, rapid technological development, volatility of consumer demands (*ibid*: p101) reflective of the current arena that HE operates within. These are not exclusive to the UK with growing global emphasis on research status and university rankings fuelling the drive towards becoming ‘world-class universities’ (Deem *et al.*, 2008). Ultimately as Duke (1992: p12) states the “managerialist tide is still flowing strong,” indicative of the changing dynamics within HE, where “even staunch defenders of academic tradition concede that all is well in the management and leadership of universities.”

Table 2.10 Values differences between public service orientation model of management and genetic private sector model

2.31 Gaps in the literature

Tapper and Palfreyman (1998: p143) highlight the value of understanding and establishing current methods of management:

“While the governance of HEIs may, at first glance, stimulate less research appeal than either an analysis of university autonomy or the idea of the university, it is of critical importance to those employed in higher education if only because it bears very directly upon the quality of their working lives”

The literature has highlighted numerous key issues and external forces that drive and affect change in management structures in universities. Research undertaken thus far has examined these issues in singularity against the traditional and new university dichotomy without more thorough review of the additional typologies or strata that exist.

As such this research intends to inform the current body of knowledge through a number of ways:

a. Overview of factors affecting UK university types

While studies have been undertaken reviewing the different external forces and issues affecting management and change in higher education, few examine these forces based on institutional differences. Current and past research reviews opinions and issues from political forces, managerialism, funding and commercialisation individually. *This research intends to review an amalgamation of a broad range of factors that affect higher education. This research intends to extend the current body of knowledge by utilising these concepts of education management in a holistic manner on the sector as a whole. It seeks to provide a more realistic and inclusive conceptual examination of the different external forces.*

Previous studies have also commonly researched higher education management issues on a case study or institutional basis within a limited range and typology of university types. *This research contributes to the current body of knowledge through undertaking a holistic study of numerous external factors combined with a UK university-wide data collection*

process with individuals strongly involved from top to bottom of institutional hierarchies. Moreover the research highlights a more diverse typology and seeks to review the prevalent issues against this. It further aims to identify recurrent as well as new issues as part of both qualitative and quantitative methodological applications, providing novel methodological approaches and insights into research in higher education management. As such the research intends to review the related effects the different external forces have in amalgamation as opposed to previously singular utilisation of concepts. It does not seek to create new typologies but seeks to utilise more diverse university groupings and potentially identify more detailed differences within the sector. It extends the current body of knowledge by questioning if the current dichotomy within the sector truly provides a reflective picture of UK HE.

Through this it is envisioned that the study will provide a thorough understanding of the issues affecting higher education management.

b. Affect change and improve understanding

As part of this research and its scope it is also envisaged that the results of the study will provide a means to understand the forces at work and perceptions of staff members from different hierarchies within universities. This, in turn, will provide a clear means to affect change and undertake informed decision-making to improve university management. More detailed understanding of current existing dynamics (the external forces alongside internal staff opinions) would provide a starting point for management. It is hoped the research would reveal key staff groups, university typologies and pertinent issues that could be evaluated by institutional by management. This would provide a means to affect change with due consideration of relevant issues.

Moreover better understanding of the external drivers of change in university hierarchy and management will also provide new avenues to progress and develop current methods. The research ultimately aims to bring current prevalent issues within the external environment and issues highlighted by staff members to the fore. This seeks to provide both internal and external individuals or stakeholders around university management with valuable information by which better understanding of prevalent issues alongside possibility for change can be affected.

While the research highlights and examines the prevalent forces alongside staff opinions, difficulties in remedying the external forces may limit the study's ability to affect change. Nonetheless it is the view of this research that more information against a more reflective typology of universities would provide additional knowledge by which management can understand the extant issues, which would inevitably affect change. Moreover, the research does not intend to affect sector-wide change, it seeks to highlight issues for decision makers in individual institutions to consider.

c. An up-to-date review of current issues

While there is a large body of literature on the area of higher education management spanning the last few decades, the majority of current literature and research is limited to changes in the early years of 2000. Since then new political forces alongside changes in the commercial focus of universities have highlighted and prompted a need to re-examine issues of management in higher education. *This study will provide a more recent review of issues and forces prevalent in higher education within the UK as the noughties come to a close.*

The research and its findings aim to contribute to the current body of knowledge and understanding within university management. The research will provide crucial insights and information on the different issues and forces that currently affect HEIs. These findings will highlight the perceptions of staff members and current environmental occurrences to better equip university managers and leaders in their decision-making.

The results and recommendations of this research will provide new foci on prevalent issues as perceived by individuals within UK Universities with an aim to improve understanding and management.

d. Introduction of tuition fees.

While not a major aim, another issue examined in this research is that of tuition and top-up fees that have recently been introduced and charged to students entering higher education in the UK. This current and very recent political shift is potentially an emergent issue that is key for research within the area. *This study aims to examine the issues*

surrounding tuition and top-up fees and intends to identify varying perceptions of academic and administrative staff members in UK universities.

Chapter 3.0 Research Methodology

3.1 Introduction

This chapter will examine the various research approaches and philosophical underpinnings undertaken for the purpose of this study. The first section will discuss the philosophical underpin behind the research approach and examine the different available ideologies and discuss their merits for utilisation. The section will then continue to identify the rationale behind the philosophical underpin selected for the purposes of this research.

In addition to this, the chapter will review the different methodological considerations undertaken and utilised that best benefits the needs of the study. These include examination of the different inductive and deductive paradigms and approaches available alongside selection of appropriate research strategies.

The chapter further examines the different qualitative and quantitative methods available and subsequently utilised and developed throughout the study. It discusses in detail the considerations required in utilising a mixed-methodological approach together with discussion of the qualitative and quantitative approaches of exploratory desk research, interviews and questionnaires. Moreover the chapter accounts for the ethical considerations required in undertaking such a large-scale study, together with utilisation of online methods of data collection.

3.2 Issues related to methodological selection

The research intends to examine the issues of managerialism, commercialisation, welfarist concerns, political discourse and commercialisation and its effects on higher education management.

Inevitably a number of issues related to methodological selection were encountered in creating a research design that could provide accurate and effective results that were generalisable to the UK HE sector as well as reflective to the aims and objectives of this study.

The majority of research approaches can undertake 3 main streams of methodologies of positivism (quantitative), phenomenology (qualitative) and pragmatism (both) it is important to select a methodology that best suits the needs of the research, a view advocated by Saunders *et al.* (2007) and Tashakkori and Teddlie (1998).

Structural hierarchies and management styles appeal to a more organised pattern of methodological data collection and analysis where correlations and statistical inferences would predictably provide statistically linked and mathematically significant conclusions within a set margin of error. Yet in order to identify the questions that need to be tested there requires some form of exploratory understanding and perhaps greater in-depth review of issues. This indicates a need for less structured but more autonomous methodological considerations alongside highly configured approaches. Miles and Huberman (1994) argue that there is a need to contend with institutions, structures, practices, and conventions that people reproduce and transform signifying more complexity in the selection of appropriate methodologies.

There is a need to uncover prevalent themes and amalgamate the issues that have been previously singularly reviewed by prior research through more qualitative and less configured methodologies. There is also further need to test and examine statistically these conjectures through more quantitative methodologies.

Undeniably befitting the needs of this research there is not only an aim to amalgamate the results of previous research but to unite the available methodological approaches to provide results that are not only based on opinions but statistically assessed to provide more accurate and indicative findings. Miles and Huberman (1994) highlight that it is increasingly common for the wholly quantitative based researcher to seek subjective meanings in their findings. Similarly qualitative based researchers themselves utilised predesigned and highly structured conceptual frames when dealing with data (*ibid*).

As such to cater for quantitative structural considerations and the need to examine qualitative nuances a dual or mixed methodological approach was examined as a means to appropriately meet the demands of the research scope. These issues are discussed in more detail below.

3.3 Discussion on philosophical underpinnings

There exist two major philosophical forms in the undertaking of any research. One that falls within the interpretivist (or phenomenologist) and qualitatively linked approaches and the other a positivist and quantitatively focused method. The nature of the interpretivist approach is one that seeks to nurture the understanding of the actions and activities focusing on issues of a qualitative nature (Bryman, 2008; Ghauri and Gronhaug, 2002; Trochim, 2002). Its approaches entail understanding and analysis of essentially more qualitative data, providing 'richer' and 'deeper' descriptions and understanding (Bullock *et al.*, 1992; Morrison, 2002) of research information collected through a more intimate, intense and prolonged contact and analysis of a life situation (Bullock *et al.*, 1992), where reality is socially constructed and given meaning by people (Easterby-Smith *et al.*, 2002). The approach centres on detailed and in-depth conducting of research through loose and highly autonomous methodology, allowing for detailed understanding of the issues identified without the restrictions of an over stratified and narrow response options, allowing for a more liberal, relaxed and emergent form of research (Easterby-Smith *et al.*, 2002). Utilising the interpretivist paradigm enables deeper understanding into how and why social actions occur (Saunders *et al.*, 2007). Creswell (2008) views this philosophical underpin as the approach of the social constructivist, which seeks to understand the world in deeper detail looking for complexity of views rather than a few narrow categories or ideas built upon the opinions and stories of research participants. Bryman (2008: p16) sees interpretivism as a contrast to positivism, in its strategic approach that respects the differences between people and the objects of the natural science, requiring social scientist to "grasp the subjective meaning of social action."

Conversely the positivist philosophical underpin is interested in hypotheses testing and sets about a highly structured approach to research, focused upon measurable data as a linear and rationale process of analysis (Bullock *et al.*, 1992; Ghauri and Gronhaug, 2002; Morrison, 2002). Based strongly in the traditional sciences a positivist paradigm utilises quantitative methodology and theory testing as its fundamentals (Saunders *et al.*, 2007) confirming or revoking theories objectively (Onwuegbuzie, 2002). Focusing on quantifiable measures a positivist paradigm is highly beneficial in confirming theories and potentially identifying associations or causal links between variables (Johnson and Onwuegbuzie, 2004). The available research methods involved with a positivist approach

enables analysis of causality (Bryman and Cramer, 1994; Morrison, 2002), examining both dependent and independent variables and further allowing the testing of research hypotheses. Its intrinsic application of numerical and statistical methods highlights its applicability in relationship exploration. It advocates the pursuit and examination of knowledge through scientifically measurable methods and a process of verifying ‘facts,’ allowing for more statistical testing of results and hypotheses (Bryman and Cramer, 1994; Johnson and Onwuegbuzie, 2004), further providing the ability to replicate and validate findings and results through measurable tests (Bullock *et al.*, 1992; Bush, 2002).

Another approach which combines both an interpretivist and positivist philosophical underpin is the pragmatist paradigm. Seen as perhaps the ‘modern and third’ method of research where understanding of the nature of things alongside scientific enquiry promotes harmony or synergy of research both numerical and qualitative (Johnson and Onwuegbuzie, 2004). The approach is built upon the realisation of the importance to apply in research “what works” (Patton, 1990 quoted in Creswell, 2008: p10), placing emphasis on the needs of the research question instead of overly on the methodologies, utilising all available techniques (Creswell, 2008; Johnson and Onwuegbuzie, 2004). Saunders *et al.* (2007) view the pragmatist philosophy as concerned with selection of appropriate methodological considerations rather than being overly focused upon philosophical underpinning. This opinion is shared by Guba and Lincoln (1994) as selection of one particular philosophy and the competing qualitative/quantitative paradigms it entails may be unrealistic in practice. Moreover Bullock *et al.* (1992: p86-87) add that through utilisation of “the best features of different approaches...research methodology is usually strengthened.”

The pragmatist philosophy avers a reflective research approach through viewing true occurrences of real-life qualitative and quantitative measures (Creswell, 2008). Its inherent approach nullifies prejudicial findings on solely interpretivist or positivist paradigms, creating a balance of understanding and hypotheses testing (Johnson and Onwuegbuzie, 2004). The nature of research within the social sciences inevitably requires some form of understanding and knowledge before more scientific methods of enquiry and examination can occur (*ibid*). Saunders *et al.* (2007) and Tashakkori and Teddlie (1998) argue against the restrictive and limiting nature with selection of positivism or interpretivism and instead advocate viewing philosophical paradigms as a continuum

rather than at conflicting positions. Sechrest and Sidani (1995: p80) add that pluralistic methodologies are “an absolute necessity in the face of overwhelming cognitive limitations and biases inherent in human mental processing” advocating utilisation of methods that fit the nature of the inquiry. Through utilisation of the ‘best’ available methodology, a pragmatist approach to research yields research findings that more closely reflect actuality (Johnson and Onwuegbuzie, 2004). Moreover, as highlighted earlier in the chapter, structural considerations for universities have both a tangible and intangible origin, where structure in itself is a manageable and quantifiable configuration its theoretical underpin is essential based on perceptions and ideologies. As such a pragmatist philosophical approach to the research would enable analysis of quantifiable structures and archetypes while simultaneously allowing examination of the mental and perceptual theory behind its conception.

The benefits highlighted in amalgamating the two approaches have warranted the use of a pragmatist philosophical approach to the research study. Interpretivist paradigms allow for a more detailed examination of data and complexity in ‘real-life’ situations, where a positivist approach allows generalisation of data and verification of factual information. Whilst positivist approaches promote quantifiable measures on research findings, a dual philosophical method approach will provide more detailed and richer data (Johnson and Onwuegbuzie, 2004) as well as allow comparisons of findings and ultimately triangulation (Easterby-Smith *et al.*, 2002; Todd, 1979). The usage of both approaches not only enriches the data collected but also allows for a symbiotic analysis of information nullifying any bias in the utilisation of a single philosophical approach.

It is important to note that the pragmatist philosophical paradigm provides a ‘third-way’ approach to undertaking research choosing to focus strongly on practicality and usage of available research tools in the examination of issues. While it may defer from traditional dichotomous approaches of the in-depth and loosely structured interpretivist or more linear and rationally structured positivist approaches, it posits that research philosophies work backwards, utilising the best available and practical instruments to adequately meet the needs of the research objectives. It avoids the ‘paradigm wars’ (Tashakkori and Teddlie, 1998) and instead focuses upon achieving the aims and objectives of the study through balancing the embedded ideologies of interpretivism and positivism. Indeed Creswell (2009: p18) agrees that mixed methods approaches utilise pragmatic knowledge

claims and as such “the research bases the inquiry on the assumption that collecting diverse types of data best provides an understanding of a research problem.”

3.4 Ontological position

Ontology is concerned with the nature of reality and questions the researcher’s position and assumptions on how the world operates and his or her commitment to particular views (Saunders *et al.*, 2007). Denzin and Lincoln (2005: p183) view ontology as questioning the “nature of reality and nature of the human being in the world.” Bryman and Bell (2007) discuss the existence of two major branches of ontological considerations – objectivism and constructivism (see table 3.1).

Objectivism highlights the position by which participants or social entities within the research scope are external or have their existence that is independent of social actors (*ibid*; Saunders *et al.*, 2007). Conversely constructivism (or as Saunders *et al.* (2007) understands as subjectivism) asserts that social phenomena exists and is accomplished by social actors (Bryman and Bell, 2007).

Bryman and Bell (2007) indicate objectivism’s position to reflect research into organisations, as structures and hierarchies within institutions have set configurations independent of the employees or individuals as social actors. Saunders *et al.* (2007) examine objectivism as managers in two different organisations operating under individually distinct conditions and thus manage in a reality with hierarchy and structures separate from themselves as social actors. Similarly constructivism would view organisations as interlinked and related to individuals and employees with both structure and social actors interacting to create phenomena (Bryman and Bell, 2007).

As the research focuses upon management structures an objectivist ontological approach would reflect the position of staff members at universities as social actors outside of changes in structural phenomena. This view would recognise universities structures to exist and change independent of what employees accomplish or do. Moreover the different external forces prevalent within the sector are not within the sphere of control of members of staff within institutions. As such the objectivist ontological approach would provide a means to understand the nature of organisations and its dynamics, viewing

changes that occur internally and those that affect it externally as independent of one another and its effects on university management (*ibid*).

Contrastingly constructivism, which views structural changes and employees as both dependent and playing key roles in its transformation is an ontological position that cannot be ruled out. Changes in structural considerations in universities could exist as part of influences by its social actors (employees, managers, staff groups) or could alter independent of them. Johnson and Onwuegbuzie (2004: p16) who advocate mixed methodological approaches, argue that neither ontological ideologies could sufficiently and accurately match the needs of solely positivist or interpretivist positions as “multiple realities” which vary from person to person create “multiple perspectives or opinions or beliefs.”

Nonetheless it is the view of the researcher that stakeholders within university management and structure are independent of each other. While there are links between social actors and the structure that exists within university management the study views the paradigms that exist as strongly embedded within institutions. This builds upon the assumptions made by Bryman and Bell (2007) and Saunders *et al.* (2000) where managers and employees can work distinctly from their structures. Moreover Bryman (2008: p18) highlight that issues relating to structure and culture within organisations can come “across as something external to the actor and as having an almost tangible reality of its own”. As such the research utilises an objectivist ontological position.

3.5 Epistemology alongside philosophical selection

Saunders *et al.* (2007) explain epistemological considerations to be concerned with what constitutes acceptable knowledge in a field of study and examine the researcher’s personal interpretation of methodological reality. The epistemological interpretation of the researcher influences his or her decisions in embracing either a ‘resources’ or ‘feelings’ perspective. Saunders *et al.* (*ibid*) argue that ‘resources’ based researchers are more inclined with the positivist philosophy in its examination of statistically quantifiable and testable techniques exhibiting more objectivity, where ‘feelings’ researchers are more involved with the qualitative, narrative and social phenomena which is intrinsically concerned with feelings and attitudes.

The aims and objectives of this research influence the methodological selections utilised in achieving the goals of this study. There is an inherent need, as a factor of considerations related to validity and reliability of data, alongside logistical issues amongst others, for the implementation of the pragmatic philosophical approach. As such the epistemological direction and concerns of the study are influenced by both a 'resource' and 'feeling' perception on the part of the researcher. The warranted usage of both qualitative and quantitative methodologies by which to attain accurate, valid and generalisable research findings and results indicates an epistemological position that advocates objective 'resource' perceptions alongside 'feelings' based approaches. Indeed Guba and Lincoln (1994) aver a focus upon methodological selections that fit the needs of the research and its questions rather than being overly influenced by research paradigms.

Nonetheless the researcher views the world from a resourced based epistemological position viewing research with a more objectivist reality of nature. Organisations are therefore "viewed as different collections of physical and intangible assets and capabilities" (Cruywagen *et al.*, 2008: p104), building upon the ontological position of this study.

3.6 Suitability for this study

Due to the nature of the research area, which not only links the dual disciplines of education and business management, the intrinsic theories behind structure and management lie with issues of the interpretivist foundation. As such it seemed valid and reasonable to utilise an interpretivist approach to the research study, undertaking research from a qualitative aspect, collecting and reviewing related data. The nature of interpretivism is to examine data that deals with understanding more complex information where numerical values and true understanding are not quantified (Sechrest and Sidani, 1993). Whilst structure can be seen to be quantifiable, its foundations stem from looser and more qualitative beginnings. It is from this that an interpretivist approach is warranted to better understand and identify the prevalent issues.

Moreover the focus of the research question requires statistical testing to potentially identify causes and causality of the effects environmental factors have had on university management structure. A positivist approach may need to be adopted. The nature of quantitative methodologies, which focus on more numerical data and statistics testing, allows for issues highlighted by the research to be examined further (Sechrest and Sidani, 1993). Moreover this approach would provide a means to identify statistically significant issues that may be linked to the research study. As such whilst early stages of the research require the use of an interpretivist approach, other stages within the course of the research will require utilisation of a positivist approach.

The need for both an interpretivist and positivist approach warrants a mixed methods approach to the research study. A pragmatist approach, marrying both qualitative and quantitative philosophical methodologies would not only satisfy the needs of this research but further provide additional benefits of the dual ideologies (Johnson and Onwuegbuzie, 2004; Morse and Niehaus, 2009). This approach would provide the benefits of collecting more complex data from qualitative methodologies, while provide a means of verification and testing via quantitative methods. The ability of a pragmatist underpin to enable in-depth understanding of issues alongside the collection and statistical analysis of research data allows for a more thorough review of the research study encompassing both qualified and quantified data. The benefits from each method will not only enable a more reliable and valid study but would nullify shortcomings of utilising a single paradigm (Johnson and Onwuegbuzie, 2004; Morse and Niehaus, 2009; Tashakkori and Teddlie, 1998). Moreover the philosophical position that the pragmatist occupies views the most practical position or ideology that applies to be the truth. As such while interpretivism and positivism may provide differing views, the pragmatist paradigm places importance on finding what works, utilising the most practical solution. Williams and May (1996: p15) indicate that as “most philosophers of science have argued that the method used is the only guarantee that the knowledge obtained is valid, reliable and thus scientific. By employing the correct method, the scientist may be sure that their findings are “true”, “repeatable” and “generalisable”. Given the nature and scope of this study and as universities are at times complex organisations, the pragmatic philosophy underpins this research

Table 3.1 Fundamental differences in qualitative and quantitative research strategies

3.7 The inductive and deductive paradigm

Bryman (2008) states that research can embark on an inductive or deductive pathway (see table 3.1). The deductive approach to research seeks to test hypotheses and theories through scientific research. The deductive process of enquiry begins with hypotheses and theories and engages in determining the validity or truth of their foundations (see figure 3.1). Through the use of statistical testing and null and alternate hypotheses this approach is traditionally linked to more positivist and quantitative methods of research. Hypotheses testing are a hallmark of the deductive paradigm allowing for evaluation of causality and identifying valid relationships through more numeric research instruments (Bryman and Bell, 2007; Creswell, 2008) (see table 3.2).

The process utilises deductive reasoning to pinpoint and recognise statistically significant issues. While the approach is primarily utilised in quantitative methodologies, its underpin does allow usage under qualitative instruments. The testing of hypotheses through numerical and quantifiable data is the traditional means of undertaking deductive reasoning, yet less structured and more open hypotheses or theories can be examined within qualitative deductive approaches (Morse and Niehaus, 2009; Saunders *et al.*, 2007).

While the deductive approach is often criticised as solely able to identify and analyse data through logical reasoning it is often rigid in its approach, which requires sufficient accurate data and testing in order to reach a conclusion, is inflexible and unable to be

fully adaptive to unsolicited data (Bryman, 2008). The highly structured approach and data required within the deductive approach necessitates exact and reliable rigorous data. Nonetheless it is in this requirement for more precise data that it allows for more accurate statistical testing and understanding of relationships between variables.

Figure 3.1 The Deductive Process

The inductive approach, on the other hand, undertakes research through the reviewing of research data and findings focusing on theory building by understanding the information collected (see figure 3.2 and table 3.2). It begins with loose and free notions of potential research issues and seeks to undertake research to identify and build upon possible theories. The inductive approach builds upon understanding and research to attain and conclude with valid and significant theories and interpretation of the results (Creswell, 2008).

Inductive reasoning essentially provides a less tangible approach to analysis. This loose and perhaps unstructured approach to research, while allowing for greater freedom to identify key issues, can have diminished reliability and a lack of generalisability (Saunders *et al.*, 2007). The inductive approach is often tailored to its specific study mainly brought about by different perceptions and personal backgrounds of each separate researcher. While this provides a rich understanding and analysis of findings it creates a question of researcher bias, value laden and prejudicial inferences reducing the ability to generalise conclusions to the research population (Johnson and Onwuegbuzie, 2004). Moreover Johnson and Onwuegbuzie (*ibid*) argue that inductive approaches can suffer from ‘induction problems’ where probabilistic evidence rather than final proof is achieved and therefore requires inductive findings not to be tested in isolation.

Figure 3.2 The Inductive Process

Nonetheless application of the inductive paradigm can be beneficial in its ability to allow for more freedom of research manoeuvre enabling more intuitive methodological

approaches to take shape. The approach further provides a greater, in-depth and less mechanistic strategy in undertaking research.

Table 3.2 Major differences between deductive and inductive approaches to research

3.8 Paradigm usage within this research

The research process will utilise a mix of inductive and deductive approaches (see figure 3.3). In order to examine the gaps in the research and increase understanding of the research topic, it is important to review data from an inductive standpoint. It is from here that a clearer research area can be identified and understood. The starting point of this research required the review of numerous secondary data resources. A better understanding of the research area led to more detailed inductive examination and research, which could be beneficial and utilised for later stages of the study. Beginning with an inductive approach provided the opportunity to review secondary data resources without prejudice and examining issues as they arose. This enabled less restrictive evaluation of data allowing for a wider examination of the different issues potentially affecting the research area. The use of an inductive approach provided the opportunity to undertake and develop theories and hypotheses that were to be tested via a deductive methodology. The level of detail and in-depth understanding through the inductive

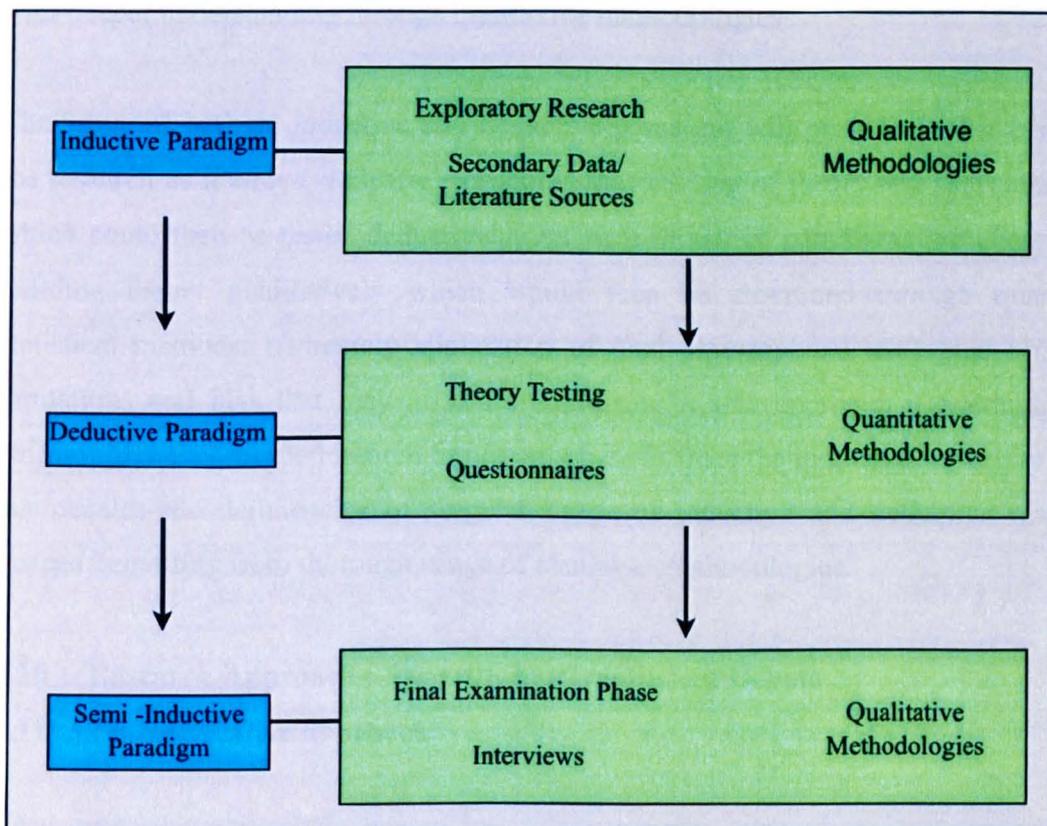
approach culminates in the creation of potential themes that could be analysed further through more deductive testing methods.

Theories built through inductive enquiry would be subject to rigorous quantitative testing examining the viability and validity of identified issues. The deductive approach allows for statistical and numerical analysis utilising more structured and scientific methods of research. The use of the deductive approach would validate key issues identified by the inductive stages of the research study. It is hoped that the dual approaches would allow better reliability and generalisability in research findings and results.

To allow for clearer and sound findings a further semi-inductive process will be undertaken in stage 3 of the study. The utilisation of further and final semi-inductive approach is aimed at enriching the overall research process creating triangulation and improving the reliability of findings. The in-depth and exploratory early inductive method sets on building theories and hypotheses that would be verified and tested through deductive enquiry. The final semi-inductive approach seeks to enrich and validate the findings of prior inductive-deductive approaches.

Therefore, the research process for this study will include an inductive approach to develop understanding, a deductive approach to test highlighted issues and a final semi-inductive process to enrich findings (as displayed in figure 3.3 below). This fits with the pragmatist philosophical considerations alongside the usage of mixed methodologies utilising available paradigms and data collection methods that benefit the needs and aims of the study.

Figure 3.3 The research process of this study



3.9 Remediating the limitations of philosophical underpin and paradigm

Utilisation of a particular philosophical underpin, be it the interpretivist or positivist positions, required the researcher to consider strongly the limitations and restraints to accurate data and reliable results.

While a positivist approach can provide statistically reliable results the approach can be overly concerned with quantitative and numerical data. Likewise the interpretivist philosophy provides in-depth understanding and theory building based on findings but can be unstructured in its approach and lacks generaliseability data (Miles and Huberman, 1994). In order to nullify the limitations and constrains intrinsic in the positivist and interpretivist philosophies this study seeks to fuse both approaches. The pragmatist philosophical underpin allows for exploitation of the benefits of each of the positivist and phenomenological approaches. A pragmatist ideology will enable the collection and analysis of data in both quantitative, structured and qualitative, loose-structured form

allowing the research to benefit from structured statistical relationship testing combined with deeper understanding through qualitative methodologies.

The usage of both an inductive and deductive paradigm will provide further benefits to the research as it allows a clearer extraction and building of theory and prevalent issues, which could then be tested deductively. As such inductive paradigms are charged with building theory qualitatively which would then be examined through quantitative statistical methods. Ultimately application of dual philosophical underpins offsets the limitations and bias that may arise from utilising a sole approach. Undertaking dual philosophies enables the research to not only benefit from the increased reliability of data but negates the deficiencies of singular usage of inductive and deductive reasoning, instead benefiting from thorough usage of available methodologies.

3.10 Research Approach – Quantitative/Qualitative Debate

3.11 The qualitative approach

Qualitative approaches utilise non-numeric understanding, focusing more on words and understanding, building upon the inductive paradigms (see figure 3.4). Concerned more so with the nature of occurrences rather than scientific statistical enquiry, qualitative approaches allow for more detailed and complex understanding of the nature of relevant issues as well as providing a free and unstructured approach to research (Miles and Huberman, 1994; Saunders *et al.*, 2007).

Utilising a qualitative approach not only allows researchers to examine more closely the issues relevant to the research perspective but also enables a wider aspect of understanding. Qualitative methodologies provide a means to assess data as it is, rather than through mathematical and statistical mediums. It is because of this that qualitative approaches allow a thorough review of data (Miles and Huberman, 1994). Analysis of qualitative data has parallels to inductive paradigms (Creswell, 2008). Usage of qualitative approaches highlights a researcher that is keen not to judge or predetermine potential research findings but rather embarks on a journey of in-depth understanding leading to a valid conclusion.

Figure 3.4 The qualitative process

Notwithstanding it has been a long criticism that qualitative methodologies are fraught with bias and researcher prejudice limiting reliability and validity of research findings, an issue which Miles and Huberman (1994) highlight as not a minor issue. While the approach allows independence from rigid and highly structure means of data collection and analysis it inadvertently opens avenues for misrepresented findings. The researcher's own opinions and perceptions can affect the course and direction of qualitative research (De Vaus, 2002). The approach nonetheless provides deep examination and review of non-numeric data and interpretation of events in the social world (Bryman, 2008).

Instruments traditionally linked to qualitative methodologies tend to be relatively unstructured and open, allowing freedom and autonomy to discover and identify issues. Secondary data research, interview and focus groups provide the opportunity to collect data away from rigid quantitative approaches focusing on the quality aspect of research rather than quantity (Bryman and Bell, 2007; Saunders *et al.*, 2007).

3.11a Coding as part of the qualitative process

According to Miles and Huberman (1994) coding is part of the analytical process of qualitative inquiry seeking to assign units of meaning to the descriptive or inferential information compiled allowing differentiation and/or combination of data with due consideration of its context. Bryman and Bell (2007: p308) highlight the importance of accurate coding as part of analysing the content of qualitative data and utilising categorisations as ‘units of analysis’.

Creswell (2008) highlights a number of ‘research tips’ to consider during the coding process. He recommends utilising expected ‘common sense’ codes, alongside codes that are exciting and not originally anticipated. Similarly Miles and Huberman (1994) advocate the sharpening, sorting, focusing, discarding and then organising of collected data through data reduction techniques. Creswell (2008) further indicates the importance of coding issues that address a larger theoretical perspective and unusual matters that can help suggest new dimension of understanding and reflection. This is echoed by Bazeley (2007) who recommends both a required closeness and distance to the work to gain a rounded perspective by which to strive and develop concepts from the data.

The coding approach can also be applied based upon (Creswell, 2008: p187):

- Codes based upon emerging information;
- Fitting data to predetermined codes;
- Usage of both predetermined and emergent codes.

Bazeley (2007: p67) adds that researchers can begin through broad-brush or ‘bucket’ coding, broadly identifying and setting-aside or “parking” text or issues that would be considered in more detail at a later stage. This allows for preliminary analysis and understanding of qualitative data in conceptual terms as the “researcher’s decisions – which data chunks to code and which to pull out, which patterns to summarise a number of chunks... are all analytic choices” (Miles and Huberman, 1994: p11).

While coding is an important aspect of the qualitative inquiry and research process it is also important to undertake a structured approach or develop protocols to ensure accurate

data analysis. Bazeley (2007: p73) state that codes can be named based upon a multiplicity of instances or issues such as “a particular setting or at a particular time, particular people or groups are involved... their belief systems or cultural background...” Indeed codes resemble an indexing system, labelling instances and actions with the collected data and organising it into its conceptual discussion and form. The coding approach can take the form of conceptual code generation (sensing and deciphering importance of an observation), through direct *in vivo* coding or indigenous codes (codes derived directly and verbatim from the language of the data) and/or *a priori* or theoretically derived codes (coding based on previous experience and background understanding of relevant issues) (Bazeley, 2007). The *in vivo* coding methodology has similarities to Berg’s (2009) summative content analysis where coding of data takes the form of the text itself (see table 3.3).

Gibbs (2002) highlights a number of structured analytical processes in examining qualitative research. Searches for commonality or patterns within collected data demonstrate a pattern matching approach where the researcher seeks to code related issues into categories based upon previous knowledge theory. The basis of pattern matching approach exists by identifying if “circumstances and the outcome coincide with that predicted” (Gibbs, 2002: p158) seeking to distinguish causal relationships.

A second approach prompted by Gibbs (2002) is that of analytic induction or explanation building. This is an extension of the pattern matching approach in that similar steps are undertaken but where findings and conclusion are expanded and applicability assessed upon on other case.

Another approach highlighted by Gibbs (2002) and Miles and Huberman (1994) but originally developed by Glaser and Strauss (1967) is the grounded theory method where qualitative data is examined and interpretations drawn from clear theory grounded in the data. Its emphasis is upon the building of theory and idea generation rather than quantitative hypotheses testing.

Gibbs (2002) and Bryman (1988) highlight a number of steps within the grounded theory approach to undertaking qualitative research. Indeed Gibbs (2002) and Bryman and Burgess (1994) recognise that many researchers seldom adopt the full set of steps. While

the approach requires data collection and analysis side by side, it has been argued that data collection and preliminary analysis should be undertaken before any review of the literature to ensure unbiased theory generation (Gibbs, 2002). Nonetheless Miles and Huberman (1994) argue that coding is an important part of the data reduction process and can lead to the generation of ideas and collation of data.

Table 3.3 Approaches to content analysis

Berg (2009) is further keen to discuss grounded theory as part of qualitative content analysis of data. He views grounded theory's approach as reflective of conventional content analysis and its coding of categories that have been derived from the data itself.

3.11b Interview Surveys as part of qualitative methodologies

Arksey and Knight (1999) and Bryman and Bell (2007) highlight that interviews can be conducted in three forms – the structured, semi-structured or unstructured interview. Structured interviews are at times viewed as a form of face-to-face questionnaires where interviewees are questioned based upon a highly structured and set list of questions (Oppenheim, 2000; Saunders *et al.*, 2007). Semi-structured interviews contain a list of issues or questions but allow the interviewer the necessary room and discretion to allow freedom of inquiry (Bryman and Bell, 2007). These enable the interviewer to delve deeper into issues that are relevant to the study without being restricted to preset questions, while simultaneously ensuring a planned structure to the interview (Arksey and Knight, 1999). Unstructured interviews allow the researcher the freedom to inquire and

examine issues related to the study without preset plans, but Saunders *et al.* (2007) warn that open interviews provide excessive leeway, which may lead to interviews losing focus.

Wiersma and Jurs (2009) indicate that interviews can be undertaken through traditional face-to-face methods but that telephone interviewing is growing in prominence. The growth in telephone interviewing is mainly attributed to its low cost and ability to interview 'hard to reach' respondents. Moreover Sudman (1981 cited in Wiersma and Jurs, 2009) indicate similar cooperation rates between telephone and face-to-face interviews. Yet face-to-face interviews provide greater flexibility and can accommodate more complexity further allowing recording of non-verbal actions or gestures as data (Saunders *et al.*, 2007). Nonetheless Wiersma and Jurs (2009) contend that telephone interviews are increasingly viewed as a worthwhile and viable alternative to face-to-face approaches (see table 3.5).

3.12 The quantitative approach

Conversely quantitative methodologies utilise more numeric and statistical data focusing on the testing of theories, seeking 'hard evidence' (De Vaus, 2002). It builds on the deductive approach to research examining the validity of hypotheses, crediting and discrediting potential theories (Bryman, 2004; Saunders *et al.*, 2007). Quantitative methods tend to be highly structured and are associated with traditional scientific data

collection and analysis techniques (Saunders *et al.*, 2007). Nonetheless these highly structured approaches limit the ability to identify and examine rich non-quantitative data. As such often deeper and more in-depth understanding of feelings is omitted from the research process, potentially neglecting other novel findings (*ibid*).

Quantitative methodologies focus on undertaking research using quantifiable methods of statistical analysis and mathematical calculations. The intrinsic nature of quantitative methodologies requires analysis into issues that are numerical and quantifiably precise, building upon the deductive paradigm and utilising more structured and numerical research instruments to undertake analysis and theory testing (Creswell, 2008; De Vaus, 2002).

Survey instruments accustomed to quantitative methodologies collect data in numeric form allowing for statistical testing. Within the social science these instruments tend to assign mathematical values to perceptual and attitudinal data (Oppenheim, 2000). While the intrinsic nature of the data is qualitative, assigning numerical values enables quantitative and statistical evaluation of potential associations between issues (*ibid*). The most common quantitative instrument is that of the closed-ended questionnaire.

3.12a Data types within the closed-ended questionnaire instrument

Bryman and Bell (2007) highlights 3 major data types that exist within quantitative data collection and analysis. The data types provide a means to categorise different figures and values into groupings thereby allowing clear identification of available statistical tests. The need to accurately understand the 3 major data types enables not only clearer questionnaire or survey design but also collection of data appropriate for the needs of the research and statistically viable (Field, 2005; Keller, 2006). Therefore in order for accurate statistical tests to be carried out, appropriate data types need to be included and thereafter collected within the survey instrument.

Nominal data consists of categorical values that essential group survey responses (Wiersma and Jurs, 2009). This data type is usually utilised to identify the characteristics of the respondent and categorising him/her into a particular demographic group with no natural rank order (De Vaus, 2002). The approach can also be used to group respondents

into perhaps a social group or a group based on his/her preference of a categorical question (Bryman and Bell, 2007; Keller, 2006).

Data collected on ranked questions falls under the data set of ordinal data. Respondents are essentially asked to rank a number of options into what they see as first, second, third and so on (Wiersma and Jurs, 2009). This approach within the social sciences provides a means to quantify positions in rank. The nature of ordinal data highlights the ideological and non-mathematically calculable distances between first and second and where there is no definite and equal gap between the rank options (De Vaus, 2002; Keller, 2006; Oppenheim, 2000). Statistical analysis of ordinal data assumes that the difference between first and second is the value of 1. Sweet and Grace-Martin (2008) differentiate ordinal values as data that may exist within logically sequenced order in contrast to nominal values where groupings can be classified into typologies and cannot be sequenced in a logical order.

Scale data consists of two other groupings – interval and ratio data. Interval data consists of data that is similar to that of the ordinal kind, but differs in that it is more defined and mathematically measurable gap between values (Bryman and Bell, 2007). It is essentially a scale where respondents are asked to rate on their options and where the distances between the categories are equal (Wiersma and Jurs, 2009). However, while ratio data has similar characteristics, it differs with its fixed zero point (Bryman and Bell, 2007; Bryman, 2008; Wiersma and Jurs, 2009). Sweet and Grace-Martin (2008) further highlight that ratio data can exist as either count variables or continuous form. Count variables dictate usage of whole numbers where continuous forms indicate ‘how much’ and therefore can have any value within a given range to include decimals.

3.13 The mixed methodology approach

Creswell (2008), Bryman and Bell (2007) and Saunders *et al.* (2007) highlight a third approach to undertaking research. The usage of a mix of both qualitative and quantitative methodologies focuses upon utilisation of a mixed methodology design. The approach advocates usage of qualitative and quantitative mediums and instruments in the data collection and analysis process further averring a mix of both inductive and deductive paradigms (Saunders *et al.*, 2007). Johnson and Onwuegbuzie (2004) differentiate

between mixed-model and mixed-method approaches to research as the former utilising both quantitative and qualitative methods within and across the research process, with the latter using similar methods as phases within the overall study.

The mixed methodology approach combines the separate streams in order to improve the overall strength of the research than in the utilisation of solely qualitative or quantitative ideologies and builds upon the pragmatist philosophical underpinning of this research (Johnson and Onwuegbuzie, 2004; Sechrest and Sidana, 1995).

Tashakkori and Teddlie (1998) detail the need to avoid paradigm and methodological 'wars' but instead focus upon utilising all available methodologies that best fit in achieving the needs of the research and build upon the usage of both inductive and deductive approaches. Moreover the research cycle infers the need for any research to move back and forth between inductive and deductive inquiry and approach in order to adequately achieve accuracy of findings (*ibid*). This view is shared by Miles and Huberman (1994: p40) who state, "at the bottom, we have to face that both numbers and words are both needed if we are to understand the world." Indeed Miles and Huberman (1994) and Tashakkori and Teddlie (1998) argue that while some researchers begin with theories and abstract generalisations or from observations, there is a need to initially build conceptual frameworks inductively through previous research. This framework then influences the direction and course of any research and as such "regardless of where the researcher starts (facts or theory), a research project always starts because there is a question that needs a satisfactory answer, and partially travels through the cycle at least once" (Tashakkori and Teddlie, 1998: p25) (see figure 3.5). Johnson and Onwuegbuzie (2004) similarly argue that regardless of the paradigm favoured by researchers both qualitative and quantitative research requires a review of empirical evidence and/or observations to address research questions and as such becomes methodologically mixed.

Moreover a number of authors have highlighted the benefits of utilising mixed methodologies

- Warranted use of methods that best fit the needs of the research (Bryman and Bell, 2007; Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 1998);

- Allows for triangulation of data (Bryman and Bell, 2007; Hair *et al.*, 2007; Hammersley, 1996; Miles and Huberman, 1994);
- Facilitates a research strategy where one method aids or complements the other (Hammersley, 1996); qualitative research facilitating quantitative research and vice-versa (Bryman and Bell, 2007);
- Ignores paradigm wars and utilises all available methodologies to provide the best results (Miles and Huberman, 1994; Tashakkori and Teddlie, 1998);
- Develop analysis and provide richer detail (Miles and Huberman, 1994);
- Inability to rely solely on one methodology; filling in the gaps (Bryman and Bell, 2007).

Additionally Tashakkori and Teddlie (1998) argue that mixed methodological approaches enable usage of both inductive and deductive approaches in answering research questions identifying a methodology that fits the needs of the research “rather than restricting or constraining researchers’ choices” (Johnson and Onwuegbuzie, 2004: p17). Moreover Johnson and Onwuegbuzie (*ibid*: p17) highlight the ‘pluralistic and complementary’ nature of mixed methodologies enabling the answering of research questions through both quantitative and qualitative solutions advocating “a needs-based or contingency approach” to method selection, seeking to produce “a superior product” (see table 3.6 for further details on the strengths and weaknesses of mixed methodologies). Yet it is also important to note the potential disadvantages of utilising a mixed-methodological approach. Johnson and Onwuegbuzie (2004) (see table 3.6) discuss the expensive and time consuming nature of utilising mixed approaches alongside difficulties in detailed understanding of quantitative analysis of qualitative data and vice versa. Moreover the authors (*ibid*) highlight that utilisation of both approaches need to equate to better results than the application of solely quantitative or qualitative methods.

For the purposes and scope of this study a mixed methodological approach provides a means to collect a wider range of data given the logistical considerations involved for the research. Ultimately a mixed methods approach to the study provides the researcher with choice (rather than restriction) of both quantitative and qualitative instruments by which to best gather and analyse data as befits the needs of the research, exemplifying the pragmatic philosophical underpin utilised.

Figure 3.6 The Research Cycle

Table 3.6 The strengths and weaknesses of mixed research

3.14 The approach of this research

Utilising both qualitative and quantitative methodologies this research intends to undertake qualitative desk research, which would inform quantitative questionnaire surveys (figure 1.1 provides a visual representation of the approach of this study). This would then be followed up with qualitative interview surveys to provide additional confirmatory data allowing for triangulation of findings. The approach is advocated by Miles and Huberman (1994: p41) as qualitative data can aid with conceptual development of ideas, where quantitative data analysis can then verify and correct 'holistic fallacies' and finally qualitatively interpreting, clarifying and strengthening theory. The approach utilises Johnson and Onwuegbuzie's (2004) notion of mixed-method rather than mixed-model techniques undertaking both quantitative and qualitative phases as part of the overall study.

Qualitative desk research involved undertaking a review of literary sources to include journals and textbooks alongside government papers. A thorough review of secondary sources to the point of saturation was undertaken, importing documents and encoding them into the NVivo qualitative software package. Coding and conventional content analysis of documents was undertaken to reveal key issues and themes pertinent for questionnaire surveys.

Quantitative questionnaire research was undertaken on staff members from UK universities. A questionnaire was drafted based on findings within the above qualitative stage of the research. A range of questions types were designed and built upon the themes identified from the earlier qualitative stage. The collected data was analysed utilising SPSS where the results were to be utilised as indicators of prevalent issues to be examined during the final interview stage.

Qualitative interviews were then undertaken with staff members ranging from teaching to administrative staff to upper management from differing university typologies. The aim of a diverse sample of profiled interviewees was to ensure that views from top to bottom of the university hierarchy are accurately reflected. Interviewing staff members from different university types further allowed for reliability and accuracy of findings across

the sector. Transcripts of interview conversations were encoded into NVivo where further findings and analysis was undertaken.

As such adhering to the philosophical underpin and strategy of this study, the research undertakes a qualitative, quantitative and ultimately a qualitative approach. This is echoed by utilising inductive enquiry, followed by deductive analysis and finally ending with semi-inductive examination and refining. The approach builds on theoretical and academic foundations identifying issues for statistical inquiry and testing, culminating in in-depth investigation, echoing Miles and Huberman's (1994) illustrative design of mixed methodology usage (see figure 3.6 below).

Figure 3.7 Illustrative Designs Linking Qualitative and Quantitative Data

Essentially the research was approached using a mixed methodology design through the use of both qualitative and quantitative data collection and analytical instruments.

In addition to this given the scope and aims of this research with due consideration of logistical and operational difficulties, the usage of a mixed methodological approach is not only supported but provides a means to collect and then measure more accurately the different issues focused upon by this study. As Bryman and Bell (2007: p656) reminds, "there is no point in collecting more data simply on the basis that 'more is better'" but rather that the requirements of each study justify the needs for mixed approaches.

3.15 Consideration of available research strategies

The following section details the different available research strategies that could be applied for the purposes of this study. It discusses the merits and potential usage of each, ultimately identifying a research strategy that fits both the objectives and methodological

needs of the study. It is important to discuss the available alternatives and discount inapplicable strategies before its selection.

3.15a Experiment strategy

Experiment research strategies take a more classical scientific base to undertaking a study. It seeks to create a controlled environment to undertake research testing, enabling more accurate and clear results to be identified. Often the approach requires a review pre intervention and post intervention to examine the existence of correlations and relationships between test results as a product of the intervention (Bryman and Bell, 2007; Hair *et al.*, 2007). Stemming from the natural sciences this strategy traditionally looks at more quantitative and scientifically bound approaches through the application of both statistics and control groups for accurate comparison. The placebo method is a common form of experimental research where two groups, one a control provided with a placebo and the other the test group with the invention. The resulting findings are compared between the two groups and significant differences perhaps concluded as causal relationships (Saunders *et al.*, 2007). Nonetheless this strategy, built on sound natural scientific enquiry, allows for reliable testing and answering of the how and why questions. The approach allows for relationships to be tested and clear parameters to be set, creating a controlled environment for accurate assumptions and conclusions to be drawn.

Bryman and Bell (2007) view this approach as an examination of dependent variables pre and post experimental manipulation and distinguish the need for three major components – the experimental treatment, the observations required and the timing of observations. In order for accurate experimentation and results there is a need to further examine environmental factors that could encourage false conclusions. The appropriate selection of test subjects through rigorous vetting to provide comparatively similar test and control groups is a required hallmark of experimental research ensuring that variances in test results are caused by the experimental treatment rather than differences in group selection (*ibid*). Moreover there is a further need to be aware of previous or historical influences of test subjects, which could threaten the viability of results. Fundamentally there is an increased need within an experimental research strategy to correctly and accurately administer the intervention to appropriately selected control and test groups (*ibid*).

This method, while scientifically sound for traditional sciences, is less applicable to the social sciences. The difficulty associated with the creation of a control group where a placebo intervention can be administered is highly complex where interventions are not as simplistic as placebo and treatment. The loose nature of social sciences creates additional difficulty and complexity in experimental strategies (Miles and Huberman, 1994).

Within the sphere of the social sciences, experimental strategies while viable require more understanding and complex parameter setting. The ability for hypotheses testing and increased reliability of data collected improves overall validity of findings. However the experiment strategy differs substantially for the purposes of this research. The inability to set up interventions and pre and post environments signals the unsuitability of the experiment approach for the purposes of achieving the objectives of this research. Moreover the need for a controlled experimental environment is highly unrealistic and logistically impractical. There is an amount of impossibility in setting up a university management structure and undertaking interventions based on numerous external forces such as market orientation or ideological shifts in politics. This strategy is therefore unsuitable for the aims of this research.

3.15b Survey strategy

A survey approach design utilises various methodological instruments to the collection of data. While applicable to qualitative methodologies (interviews, observations and focus groups) (De Vaus, 2002; Fowler, 2002) the approach traditionally advocates the use of quantitative questionnaires for the collection of research data (De Vaus, 2002; Pinsonneault and Kraemer, 1993; Saunders *et al.*, 2007; Wiersma and Jurs, 2009). The approach utilises a more deductive paradigm in data collection and analysis in its data testing identifying relationships between researched variables. The strategy improves the ability to reach a wider audience enabling more extensive data collection and more generalisable results (Pinsonneault and Kraemer, 1993). Moreover the ability to control and highly structure the survey together with pilot testing allows more precise and reliable data to be collected (Bryman and Bell, 2007; Pinsonneault and Kraemer, 1993). Unfortunately as survey instruments are targeted at a specific group and respondent base, questionnaire designs need to be sensitive to the intended research group (Bryman and

Bell, 2007; Hair *et al.*, 2007). In addition to this, extensive piloting and testing of the questionnaires needs to be undertaken to ensure that coherence as well as communication of the questions enables understanding on the part of the respondent together with data collection that meets the needs of the researcher.

Structured interviews as mentioned can be utilised within a survey research strategy. The ability to gather more qualitative data enables a more detailed understanding of the research issues (Saunders *et al.*, 2007). Moreover, while not statistically tested, the deductive approach of evaluating causality and inferences can be undertaken through qualitative interview analysis (Bryman and Bell, 2007; Miles and Huberman, 1994).

The survey strategy requires the collection and examination of data at a single point in time, reviewing the issues existent at that moment undertaking a cross-sectional approach to research or via longitudinal designs. As such the approach can collect and review data over a period of time at set specific points (longitudinal) or at solely one point in time (cross-sectional) (Wiersma and Jurs, 2009). Pinsonneault and Kraemer (1993) while arguing that longitudinal studies can provide more accurate results and causal inferences, highlight that cross-sectional designs would similarly allow 'safe' generalisation of findings and determination of causality (albeit for that one moment in time).

As such the survey strategy provides the researcher with a range of instruments by which to collect different data types for different methods of analysis, enabling a more versatile means of undertaking research (Wiersma and Jurs, 2009). The range of data types further provides numerous options in the accumulation of more loose but 'rich' qualitative data or more structured statistically viable quantitative data, as best fits the needs of the study. This is echoed by Pinsonneault and Kraemer (1993: p81) who highlight that utilisation of survey research strategies is determined strongly by "the problem or question the researcher addresses."

This research would essentially seek to utilise the foundations of the survey approach employing questionnaire and interview surveys through a cross-sectional design in order to achieve the objectives set out. The ability for this approach to provide the necessary instruments and methodologies that enable realisation of the targets and goals of this research distinguishes its potential applicability. Moreover, while it may be advantageous to review the cause and effect through longitudinal design, the inability to collect data

after the fact (i.e. effects that took place since the 1960s) suggests cross-sectional approaches as most viable.

3.15c Case study strategy

The case study approach seeks to investigate empirical data, studying in great detail a particular case (Saunders *et al.*, 2007) and can be undertaken through single or multiple cases. Bryman and Bell (2007) explain their definition of case, which could include a study on a location, organisation or even workplace and require more often the review of situational qualitative data undertaken commonly through participant observation and unstructured interviews. Their definitions of case include:

- A single organisation;
- A single location;
- A person;
- A single event.

Case study strategies require extensive understanding of the case favouring qualitative approaches, which satisfy this need for richer data that is ultimately “helpful in the generation of an intensive, detailed examination of a case” (Bryman and Bell, 2007: p62). Nonetheless the authors go on to explain that the case study approach is not the sole domain of qualitative research but where quantitative measures can further be applied in undertaking research. Yin (1994) argues that case study research is often misunderstood can be effectively utilised in research into the social sciences as well as the traditional disciplines, answering the ‘how’ and ‘why’ questions. The overall objective in undertaking a case study research strategy is to provide an in-depth review of a research focus aiming to uncover or identify issues that are significant and specific to that case (Bryman and Bell, 2007). Yin (1994: p13) adds that case study research can embody ‘empirical inquiry’ and seek to investigate phenomena in its real-life context, as well as in the form of ‘case study inquiry’ utilising an all encompassing methodology in data collection and analysis.

Yin (2003) further advocates the need to identify specifically the case method approach applied to any research:

- The critical case – a greater understanding of circumstances leading to hypothesis testing results;
- The unique case – the extreme case;
- The revelatory case – undertaking research on previously unavailable data and methods;
- The representative or typical case – exploration of a case that reflects daily situations;
- The longitudinal case – examination of case changes over time.
-

As the research does not focus upon a single university or group of institutions the case study approach seems unviable. Nonetheless as the research seeks to examine all UK universities the volume of work and case study material that needed to be consulted would have been an unrealistic approach to achieve the set objectives. Moreover it would have been difficult to foresee, given the time, cost and logistical constraints, that such an approach would provide data and findings any more viable than through other more applicable strategies.

3.16 Research purpose

Saunders *et al.* (2007) detail the need for any research to decide upon appropriate purpose. This methodological understanding allows for clarity and definition of the goals and aspirations of the study. Interlinked and intertwined with the aims and objectives of the study it is important to determine the purpose that befits the needs and scope of the research.

They (Saunders *et al.*, 2007) examine a number of research purposes that can be applied within any research setting.

A descriptive research study looks at detailed understanding and review of a particular issue aiming to provide an accurate profile and assessment of the event. Descriptive research looks to explain and itemise its research focus seeking to perhaps extend or build upon the current body of knowledge in the area (Creswell, 2008; Pinsonneault and

Kraemer, 1993). The approach is seemingly highly qualitative in nature looking at deeper and richer understanding of events and issues viewed through a more realistic 'lens'. Within a survey strategy Pinsonneault and Kraemer (1993) indicate that the researcher's position is merely to describe or communicate values of distribution and spread rather than analytical information.

Similarly, **an exploratory study** looks at discovering and uncovering new insights and issues to current research problems and dilemmas seeking to delve deeper and create more detailed understanding of a phenomenon (Creswell, 2008). Saunders *et al.* (2007: p133) discuss three principle methods of undertaking exploratory studies:

- A search of the literature;
- Interviewing 'experts' in the subject;
- Conducting focus group interviews.

Pinsonneault and Kraemer (1993) state that exploratory studies related to survey strategies seek to improve familiarity within a topic and the concepts about it further intending to discover new possibilities and dimensions that exist within the surveyed population.

An explanatory study looks at identifying and testing the existence of causal relationships in research phenomenon and events (Creswell, 2008; Saunders *et al.*, 2007). Traditionally seen as a quantitative approach through statistical testing and research, explanatory studies can further be undertaken through qualitative methodologies. An explanatory study provides the ability to utilise both traditional quantitative testing and qualitative data explanatory approaches available via the survey strategy. It seeks to not only test theory and identify causal relationships but aims to ask why relationships exist (Pinsonneault and Kraemer, 1993).

3.17 Research strategy and purpose of this study

An examination of the available strategies revealed that the most applicable approach to this research study was through the survey strategy seeking to collect data at that point in time utilising the available survey instruments. This is in agreement with the needs of the

research to collect both qualitative and quantitative data through interview and questionnaire surveys. Moreover the strategy provides the most viable methodology that would accurately address the aims and objectives of the research.

This study is predicated upon both an exploratory and explanatory purpose seeking to build theory, identify and test relationships and undertake clearer holistic understanding of the established issues. While the study can be viewed as explanatory in its search for relationships and causality, in its early conceptual practices and methodologies it corresponds strongly to exploratory intentions. Moreover its overall approach and purpose seeks to understand and uncover through exploration while identifying relationships through explanation. The utilisation of mixed methodological philosophies, paradigms and approaches is indicative of this.

Ultimately the survey strategy alongside the exploratory and explanatory purpose of this research not only complements the scope and objectives of the study but also corresponds strongly to the methodologies utilised and the pragmatist philosophical paradigm.

3.18 Ethical obligations of the researcher

Within the context of any research is an important need to ensure an ethical and trustworthy approach to not only data collection and analysis but also truth in communication of findings (De Vaus, 2002; Gay *et al.*, 2009). Burns and Burns (2008) indicate that there is an inherent need for any research to contain value and ethical considerations. In order for research findings to be both valid and disseminated into the public domain, the researcher must uphold tacit obligations to ensure that moral and ethical responsibilities to both the research itself and the readers of the research have a fair and unbiased review of findings (Bryman and Bell, 2007). Moreover it is often argued that any researcher has both a moral and professional duty to ensure that adequate ethical values are adhered to, and that considerable measures are undertaken to minimise adverse effects to research participants (*ibid*; Bryman, 2003; DPA, 1998; Saunders *et al.*, 2007).

Similarly De Vaus (2002) and Creswell (2008) highlight that ethical research needs to be free from bias as a product of sponsorship and exhibit sensitivity to the sampled population to not discredit the research enterprise.

Ethics within any research can be grouped into two main streams – ethical approach of participants of the research and an ethical approach to fair and truthful communication of research findings.

Bryman and Bell (2007) highlight that ethical research requires examination of:

- Harm to participants;
- Adequate informed consent;
- Invasion of privacy;
- Existence of deception.
-

3.18a Harm to participants

There is a need to identify what constitutes harm to a participant of any research. Bryman and Bell (*ibid*) view harm to participants as afflicted by tangible effects physical in nature or those of more intangible psychologically form. They, alongside Bryman (2008), highlight that harm further includes uncalled for vested interest on the part of participants who themselves put themselves at risk or jeopardy by partaking in the research.

3.18b Informed consent

Bryman and Bell (2007) and Creswell (2008) detail within a business context, the need for informed consent through clear and precise explanation to potential participants on the nature of the research, thus eliminating disguise and covert research tactics. Their principle of informed consent requires that all participants are provided with as much information as possible on the needs and goals of the research together with how the collected data will be kept and analysed in order for them to make an informed decision on choosing to participate. Burns and Burns (2008), De Vaus (2002) and Saunders *et al.* (2007) further detail the need for voluntary participation and ensuring that participants are not coerced into undertaking any research. Moreover they highlight the need to ensure

that participants have the necessary right to withdraw and any data collected from them excluded and deleted from the research.

Nonetheless this is not without difficulties within the research design. The nature of the research population and its subsequent sample group tends to require a representative mix of participants, which creates complexities in achieving true informed consent (Bryman and Bell, 2007). Moreover as different individuals will have different concerns along the range of the sampled group there is a further issue of practicality in fulfilling informed consent across the board (De Vaus, 2002). In addition to this, numerous arguments have put forth the occasional need to undertake covert research (Bryman and Bell, 2007) with De Vaus (2002: p61) arguing that individuals should only “provide informed consent after they have completed the questionnaire” in order not to invalidate the study. The very nature of informed consent, while ethically sound, can and does hinder effective and accurately reflective research as behavioural and answer patterns of participants change (*ibid*). Yet when such a last resort approach is undertaken other constituent parts of ethical research such as confidentiality and privacy are strongly adhered to, ultimately nullifying any potential harm to the participant (*ibid*). Moreover, while these can limit and create restraints to the collection of accurate and sufficient data amounts, it is key and vital that such ethical considerations be included and practiced in any research. Indeed any data of a sensitive nature should be collected with due consideration of this as Burns and Burns (2008: p35) states “the advancement of knowledge and pursuit of information are not in themselves sufficient justifications for overriding ethical values and ignoring the interests of those studied and those who do not wish to be studied.”

3.18c Confidentiality and privacy

There is a further need to ensure that if negotiated and agreed upon, considerably honouring of participant confidentiality and anonymity is administered. The very nature of sensitive research warrants the need for both professional integrity and trust to ensure that any personal and potentially harmful data provided by participants remain undisclosed (Bryman and Bell, 2007; De Vaus, 2002; DPA, 1998). Legal and academic ramifications of non-compliance of confidentiality can be severe and potentially very damaging to both participants and the research itself (Sekaran and Bougie, 2010). Bryman and Bell (*ibid*) measure an invasion of privacy by the degree to which the invasion can be

condoned, which alter accordingly to the rigours of the research instruments and methods utilised. Burns and Burns (2008) highlight two important notions that need to be considered and adhered to when ensuring confidentiality and anonymity. They explain that anonymity entails concealing the identity of all documents related to participants where confidentiality pertains to consideration of who has right of access to data collected for the purpose of the research. They (*ibid*: p37) posit that issues of confidentiality and privacy can be circumvented through:

- Restricting access to completed original data;
- Restricting access to data on computer files;
- Revealing any information only with participant consent;
- Ensuring any case numbers or any details that can distinguish participants are kept separate from coding keys or original data forms.

De Vaus (2002: p62) highlights that research is improved with assurances of confidentiality as respondents provide more honest and higher quality responses; it improves participation; and ultimately protects a person's privacy.

Moreover the authors indicate a need for any research to ensure that participants are free from intrusion or cause difficulties if a survey has to be undertaken.

3.18d Deception

Deception is the limiting of participant understanding of the research being conducted. It creates a situation where the research described to participants is dissimilar to the achieved goals and focus of the research itself. The need for deception occurs when the researcher seeks to collect data discretely without the need to accurately describe the main subject matter of the research, in hopes of gathering data free from bias that may appear with informed consent (Bryman and Bell, 2007; De Vaus, 2002).

This however can cause severe ramifications as participants may, if truth were found, choose to terminate their involvement with the research further requiring that any collected data be destroyed. Moreover while deception provides unbiased data, this approach creates difficulties in dissemination of research findings, as truth is slowly

unveiled. There is an ethical need to remain fair and trustworthy (Sekaran and Bougie, 2010).

3.19 Validity, reliability and triangulation

Validity in any research is paramount to accuracy of findings and conclusions, as Bell (1999: p104) aptly states “validity... tells us whether an item measures or describes what it is suppose to measure or describe.” Moreover validity in any research is concerned with the ability of the results and subsequent conclusions that are accurately drawn from the findings of the research.

Conversely reliability “relates to the probability that repeating a similar research procedure or method will produce identical or similar results” (Bush, 2002: p60), a view further advocated by Bryman and Cramer (1994).

Within qualitative paradigms, Morrison (2002) and Bryman and Cramer (1994) assert that examination of reliability requires that similar observations undertaken by other researchers occur. It is the intention of this study that interview findings will be validated by the literature.

Bryman and Bell (2007) highlight the need to ensure measurement validity, internal validity, external validity and ecological validity.

Measurement validity is concerned more so with quantitative approaches and assesses the quality of a designed instrument to accurately collect data that is reflective of what it seeks to uncover (*ibid*). As issues incorporated from exploratory desk research phases into the quantitative questionnaire stage were drawn from a variety of discourses within the area to saturation point, measurement validity in questionnaire construct is strengthened. Moreover as issues identified were grounded in theory the ability for the questionnaire instrument to measure satisfy its measurement aims is highly likely.

Internal validity is concerned if a measurement of causality or causal relationship is accurately reflective of the true nature of things (Hair *et al.*, 2007). Are relationships true or do they exist as a product of other issues? Statistical tests of reliability were undertaken

on pilot questionnaire findings to examine the viability of the instrument in providing accurate findings. Cronbach Alpha reliability tests (Field, 2003) on questionnaire results provided an internally valid measurement score. Moreover improvements undertaken on the preliminary questionnaire enabled implementation of a tested and refined data collection instrument (see table 3.7 for detailed discussion).

External validity involves examining the ability of results to be generalised to the wider context away from solely the specific researched group. Bryman and Bell (2007) discern this accuracy to lie in appropriate respondent selection and sampling methodologies. The questionnaire and interview phases of this research were restricted to a non-probability sampling methodology due to unviable approach of compiling an accurate sampling frame. The purposive sampling method, which includes a wide range of respondents from different university groups, provided responses collected from a representative group that matched set criteria. This approach was utilised on both the questionnaire and interview phases to ensure that the data collected was reflective of the population and as such externally valid (see table 3.8 for detailed discussion).

Ecological validity is concerned with whether social findings are applicable to normal and everyday settings. Bryman and Bell (2007) argue that if findings are ecologically invalid then results and conclusions are scientific artefacts and not valid and usable in everyday world. As the focus and objectives of this research provides the ability to affect change and intends on studying the occurrences in its natural settings rather than create an experimental laboratory from which could affect ecological validity. Moreover utilisation of mixed methodologies provides a means to build on questionnaire results with more in depth understanding of the way things work through qualitative interviews, nullifying as best as possible concerns with ecological validity.

As the study entails utilisation of both qualitative and quantitative methodologies to achieve its objectives, the benefits of mixed methodological approaches allows for triangulation of data from a variety of sources. Essentially as data collected from qualitative exploratory phases facilitates quantitative questionnaire stages which in turn is completed by qualitative interview surveys it enables data to be collected and verified against triangulated sources. Bryman and Bell (2007) highlight the ability for one methodological approach to facilitate another allowing for more accurate alignment of

methodologies and in turn more reliable and accurate results. The authors review the ability for qualitative research to facilitate the generation of hypotheses and aiding quantitative measurement design and thus supporting the quantitative research stages. Moreover they similarly highlight the ability for quantitative research and its findings to reinforce structural considerations in qualitative methods such as case selection or deeper understanding and interpretation of tested hypotheses and results (*ibid*). The usage of mixed methodology approach reinforces and ensures validity and reliability within the findings of the research.

Table 3.7 Threats to internal validity and the response of this study

Triangulation entails the collection of data from numerous sources or methodologies to allow verification of results through cross checking of findings from different sources ensuring reliability and validity (Miles and Huberman, 1994; Hair *et al.*, 2007; Todd, 1979). Bryman and Bell (2007) similarly understand this approach as an investigation that entails utilisation of one method and research strategy that is crosschecked with another utilised method or strategy. Sechrest and Sidani (1993) highlight the mixed methodological approach as complementary to one another where non-qualitative findings inform non-quantitative results and vice-versa – triangulation by plural methods.

Table 3.8 Threats to external validity and the response of this study

Hair *et al.* (2007) document four forms of triangulation, which include researcher triangulation, data triangulation, method triangulation and theory triangulation (see table 3.9 below).

Table 3.9 Types of Triangulation

This research intends to utilise methods triangulation to ensure accuracy of results and findings based upon the collection and analysis of data through mixed methodological approaches. In line with the philosophical and methodological considerations of this study, triangulation exists as a product of the need to utilised mixed methodological approaches, which are “able to reveal much more than could have been gleaned through one approach alone” (Bryman and Bell, 2007: p655). Moreover as a pragmatist paradigm is warranted for the purposes of this research the usage of mixed methodologies and triangulated findings would bolster and improve the overall accuracy of results and subsequent conclusions.

In its simplest form mixed-methods approaches will allow triangulation of data from numerous sources and well as promote internal validity as qualitative data is verified by quantitative data and vice-versa (*ibid*).

Chapter 4.0 Methods

4.1 Introduction

This chapter discusses the different stages of the research study detailing the usage of exploratory research, the quantitative questionnaire and qualitative interviews as part of the research phases. It highlights the key issues involved within the selection of methods within the different phases and examines the particular methods of analysis.

It documents the design and distribution of the questionnaire alongside the different requirements for ethical design and piloting with consideration of valid sampling methodologies, further examining the use of the online questionnaire as a means to reach a wider sample group and to elicit increased response rates.

Moreover the chapter discusses similar issues related to interviewing of respondents and the ethical considerations required alongside the measures undertaken to improve validity and accuracy.

Ultimately this chapter examines the different qualitative and quantitative methods undertaken to fulfil the needs of this study.

4.2 Overview of stages within this study

4.2 Stage 1 – Exploratory research phases

4.2a Phase 1

The development of ideas and research considerations together with a review of the literature was undertaken in this phase thus enabling a more detailed and holistic understanding of the research subject and its implications.

This phase sought to built upon the body of previous and current theoretical knowledge and prevalent issues in UK HE alongside consideration of potential viable research approaches. Logistical limitations, scope of the research, generalisability and access to research participants were considered and discussed during this phase.

4.2b Phase 2

An examination of literature on research methodology was developed further in this phase to ensure a better and more accurate methodological approach. Research methods theories were examined and developed, scrutinising the possible survey options and approaches to mixed methods data collection and analysis. Remedial action related to issues of permission to undertake research at the participating universities, ethical and privacy issues, informed consent and security of data were considered in this phase with suitable methods explored and employed.

A number of research methods training courses were also undertaken to better equip the researcher for the purposes of mixed methodological approaches to the study.

This phase constituted the exploratory research stage where a review of numerous secondary literature sources was undertaken and analysis conducted through NVivo qualitative software package. The development of these findings were incorporated and designed into stage 2 of the study.

4.3 Stage 2 – Quantitative research phases

4.3a Phase 3 & 4

Stage 2 of the research undertook the design of the quantitative questionnaire. Development and refining of the questionnaire alongside rigorous pilot testing and redevelopment was conducted. Pilot study results were analysed with reliability tests undertaken to ensure validity and coherence of data. Consideration of research population, sampling methodology and questionnaire delivery was further undertaken with remedial action taken where required.

Usage of both hardcopy and electronic questionnaires was administered to sampled participants, where collected responses were imported into the SPSS quantitative software package to be analysed. Second and third mailings of the questionnaire were undertaken to ensure a better response rate.

4.3b Phase 5

A review of questionnaire findings was undertaken during this phase alongside statistical analysis to identify key issues as highlighted by respondents. Various statistical tests were undertaken to not only ensure reliability but to examine in detail the different perceptions and responses of staff members working in UK universities. The results of these statistical tests were incorporated into stage 3 of the research.

4.4 Stage 3 – Interview research phases

4.4a Phase 6

Analysis of data from stage 2 of the research was undertaken where identified important issues were to be utilised in interview protocols and themes. Participating respondents from the questionnaire phase were profiled and invited to attend an interview session either face-to-face or via telephone.

A number of constraints such as availability, geographical location and cost were factored into access to profiled interviewees. Telephone interviews were seen as remedial to this problem.

Collected transcripts were inputted into NVivo where analysis of qualitative data was undertaken through data coding and examination of recurrent issues.

4.4b Phase 7

Overall examination of collected data during the 3 stages was undertaken to amalgamate findings holistically. This required examination of exploratory results, questionnaire analysis findings and final interview data allowing for triangulation.

Final results were drawn and inferences made on the environmental effects on higher education and changes as a product of new managerial archetypes. Conclusions based upon the aims and objectives of the research were also drawn.

4.4c Phase 8

Amalgamation of research findings and results into the writing up stage of the study.

Table 4.1 The research stages

Mphil Stage Tasks																				
Stage 1																				
Phase 1	Literature Review																			
	Research Methods Training by Graduate School																			
	Development of Ideas and Research Considerations																			
	Review Current Frameworks of Educational Structure																			
	Write Research Proposal for Registration.																			
	Develop a timeline of major reports and political changes in HE																			
	Review issue of top-up fees																			
	Attend focus group meetings to attain a practical knowledge																			
Phase 2	Critical Thought of Research Design Appropriateness																			
	Extensively review government reports and journal publications																			
	Evaluate case studies undertaken on other universities																			
	Remedy Research Considerations																			
	Access to Information																			
	Ethical Issues																			
	Population and Sample Size																			
	Interviewee Profiling																			
	Seek Research Committee and Ethics Committee Authorisation																			
	Undertake SPSS training																			
	Undertake Nudist and Nvivo training																			
	Analyse and compile secondary data findings																			
Stage2																				
Phase 3	Develop Questionnaires based on secondary research																			
	Schedule appropriate dates for quantitative surveys																			
	Undertake pilot study of initial questionnaire																			
	Evaluate success/validity of questionnaires																			
	Resolve questionnaire shortcomings if necessary																			
Phase 4	Distribution and collection of questionnaires																			
	Input, review and organization of data																			
Phase 5	Undertaking analysis of findings through statistical packages.																			
	Preliminary Review and brief write-up of Findings																			
	Review of significant findings of the research																			
	Incorporate findings into qualitative research																			
	Develop initial framework model of environmental forces																			
	Submit transfer document from Mphil phase to PhD phase																			

Table 4.1 The research stages continued

PhD Stage							
Stage 3							
Phase 6							
	Literature Review						
	Develop interview questions and materials from questionnaire findings						
	Undertake interviewing skills training						
	Schedule appropriate and convenient interview dates						
	Conduct interviews with profiled interviewees						
	Carry out focus group sessions at both universities						
	Compile qualitative data and undertake qualitative analysis on Nudist/Nvivo						
	Identify emerging issues through triangulation						
Phase 7							
	Review qualitative findings with quantitative data analysis results						
	Evaluate findings to identify structural effects of managerialism on education						
	Evaluate findings to identify frameworks into management changes in HEI						
	Evaluate issues emerging from findings of primary and secondary research						
	Amalgamate findings to create new archetype of education management in higher education						
	Ensure the inclusion of all valid primary and secondary data in framework model development						
	Discuss findings with supervisory team.						
	Develop final concept/framework of hierarchial changes/structure and its future implications						
Concluding Stages							
Phase 8							
	Determine final structure of thesis						
	Commence Writing-up						
	Final discussions, and issues of formatting requirements to be undertaken with supervisory team						
Phase 9							
	Complete Writing-up						
	Viva-Voce examination						
	Corrections on thesis						
	Binding						
	Submission						

4.5 The research stages - Exploratory research phases

Stage 1 of the study includes exploratory research through different available secondary resources. Reviewing data of a secondary nature provides the researcher with a glimpse on the keys issues and other considerations that need to be factored into the research study. The nature of secondary data provides different and varied points-of-view and points-of-interest on which the researcher can build. Moreover as explained in the philosophical underpin section of this thesis, structural considerations emanate from understanding and application of previous discoveries and literature. It is then pertinent that consultation of secondary resources enabled exploration of related and relevant issues providing a sound basis for the research to advance to the next stage. Consultation of numerous secondary data resources to include journal publications, published texts and government literature were undertaken utilising the NVivo software package, where emergent and recurring themes were identified and highlighted for the quantitative questionnaire phase of the study. The approach, as discussed by Bryman and Bell (2007) is a form of computer-assisted content analysis, where coding of data is done electronically.

Numerous journals were consulted together with different government policies and published white papers. Journals relating to universities and HE systems outside of the UK were also reviewed to enable a wider understanding and comparative analysis of the HE sector. These journals were entered into the NVivo software package and coded. A number of key and reoccurring themes were identified aiming to provide a source of hunches and hypotheses which quantitative work can go on to test (Brannen, 1992). These issues were coded utilising a conventional content analytical approach, categorising and grouping data inductively from secondary data (Berg, 2009).

These were incorporated into questionnaire surveys.

4.6 Quantitative questionnaire phases

Questionnaires were utilised partly due to their ability to be quickly and widely administered to an extensively selected sample group (Bryman and Bell, 2007; Saunders *et al.*, 2007). For the purposes of this research the need to collect staff responses from

universities around the UK required logistical consideration of research methodology. As self-administered questionnaires provided a means to reach the targeted sampled population of the study they enabled sufficient collection of data befitting the needs of the research. Moreover the logistical constraints of nationwide travel and costs were nullified through utilisation of postal and electronic questionnaires.

Nonetheless there are issues that need to be considered in the utilisation of self-administered questionnaires. While the approach limits researcher interaction and in turn researcher influence and bias upon respondents, thus providing more accurate responses, the inability for more detailed probing or collection of additional data once the survey has been administered restricts thorough examination of issues (Saunders *et al.*, 2007). Moreover many studies have suggested that postal questionnaires suffered from low response rates caused by issues of seasonality and length of questionnaires (Oppenheim, 2000; Wiersma and Jurs, 2009). This issue is further prominent within an HEI setting as term time and semester breaks greatly affect participation rates. Furthermore as university staff members today are increasingly required to extend their current workload survey participation is usually met with reluctance.

Oppenheim (2000) and Bryman and Bell (2007) have suggested ways in which to improve responses rates, which may include prize draws, shorter questionnaires and novel usage of coloured paper. What is evidently clear from the literature is that questionnaire design in both its questions and focus needs to be considered carefully alongside questionnaire structure, sections and clarity. Ultimately most offer a range of question types, which would yield different data types promoting more intensive analysis of the collected information (Bryman and Bell, 2007; Oppenheim, 2000; Wiersma and Jurs, 2009). Another key requirement is pilot testing of questionnaires to ensure both applicability and clarity of structure and language (Oppenheim, 2000). Clear instructions are indispensable hallmarks of thoughtful questionnaire design (Wiersma and Jurs, 2009).

For the purposes of this research utilisation of both a hardcopy and online version of the questionnaire was undertaken to improved response rates by providing potential respondents with a choice of questionnaire medium, allowing for ease of completion. Moreover as the issues related to the research essentially reflected and affected the respondents' environment and workplace, individuals were thought to be motivated in the

research's ability to highlight problems and affect change. This effect is recognised by Wiersma and Jurs (2009: p215) who state, "other factors, such as the importance of the survey content to the recipient, influence response rates more than the method by which the survey is received."

4.6a Utilisation of online surveys

Wiersma and Jurs (2009) indicate a number of advantages web-based surveys can have over traditional postal questionnaires. They alongside Anderson and Kanuka (2003) highlight that online surveys enable quicker response times and no lag times in mail delivery alongside little to no associated costs of print and post. Bryman and Bell (2007) document a clear distinction between e-mail and web surveys as potential methods for online surveying. They highlight that e-mail surveys are questionnaires that have either a questionnaire attached or copy embedded within the e-mail itself with Sheehan and Hoy (1999) adding that the method is best utilised in smaller sample group settings. This is in contrast to web surveys, which operate via websites, which are accessed by respondents. Bryman and Bell (2007: p676) discuss the benefits that a web survey approach can have over its e-mail survey counterpart, in its ability to contain "a wider variety of embellishments in terms of appearance" thereby eliciting better response and completion rates. The authors go on to aver that the web survey approach allows for filter questions to be attached, with collected data easily collated into analysis packages. The benefits highlighted by Bryman and Bell (2007) were important factors in the selection of SurveyMonkey, which provided similar operational abilities to the website utilised for online surveys design and response collection (see table 4.1 below).

Table 4.2 Factors to consider when conducting web-based surveys and remedies for the purposes of this study.

4.6b Available statistical analysis - Analysis of Variances (ANOVA)

The ANOVA test is similar to t-tests in its ability to uncover differences in mean scores between groups. It differs in its use upon more than two groups. Malhotra and Birks (2006) explain the ANOVA technique as a form of repeated measures analysis of variance, extending paired sample t-test to apply in cases of more than two related samples. The approach allows testing for differences in rating scores amongst more than two groups allowing for perhaps more complex nominal and categorical variables to be analysed alongside interval and ratio data. ANOVA tests further provide the ability to test more realistic groupings where more than two simple categories exist. Field (2005) explains that ANOVA in its regression approach compares differences in systematic and unsystematic variances seeking to identify F-ratio variations. The ability to provide such data through an ANOVA enables the researcher to test for overall experimental

manipulation success but as Field (2005) reminds, its limitation lies in its inability to provide information specific to the groups analysed. Identifying levels of statistical significance is a hallmark of ANOVA testing, providing clear results on the existence of effect based on variable groupings alongside strength of effect via F-ratios. Hair *et al.* (2007) aver by adding that examination of F-test results in indication a significant difference between the groups and in turn an increased chance of rejecting the null hypothesis. They state that the F-distribution is essentially the difference between variances within and between the examined groups, which differs to t-tests examination of only two groups. The authors and others (Field, 2005) further advocate that a high F-distribution score highlights increased likelihood and larger statistical differences between the measured groups.

Malhotra and Birks (2006), similarly argue that F test results only provide an indication of differences in means and therefore contrasts in the form of *a priori* or *a posteriori* should be undertaken. They highlight a predetermined testing approach (*a priori*) undertaking contrasts examination based on the researcher's framework before ANOVA analysis.

Nonetheless a drawback of ANOVA testing is its inability to distinguish more clearly which groups are different. While the ability to highlight differences in mean scores of the tested groups, in order to examine further differences specific to each tested group other additional tests need to be undertaken to provide a clearer picture of effects. Hair *et al.* (2007) advocate the use of follow-up testing to provide a more indicative picture of group differences. The *a posteriori* approach reviews contrasts *post hoc* or after ANOVA analysis (Malhotra and Birks, 2006). These enable pairwise comparisons of mean scores highlighting differences in the selected groups. A number of *post hoc* analytical tests are available for this.

As such ANOVA tests provide the researcher with the ability to identify the existence of differences in mean scores between the various university typologies and staff groups (as highlighted in figure 1.1). Utilisation of *post hoc* approaches will allow clearer distinction of where these differences lie.

4.6b.1 A Priori approaches

While *a priori* testing methods could have been utilised within this study, the research approached questionnaire data in an exploratory manner aiming to identify issues that were prevalent in the first literature research phase. The approach advocated the understanding of issues and relationships between variables utilised in the questionnaire and sought to examine their existence rather than test for them. As Field (2005) and Malhotra and Birks (2003; p503) explain, the *a priori* testing approach is undertaken “in lieu of the ANOVA F-test.” Since the study will utilise ANOVA testing to examine differences in means scores of the tested groups the *a priori* approach is not a viable approach for the purposes of this study.

4.6b.2 Post hoc tests

Post hoc tests are grouped under the *a posteriori* approach of further ANOVA results analysis. The tests fall within the family of multiple comparison procedures of statistical approaches (Toothaker, 1993). It undertakes further analysis and identification of differences in mean from the groups off significant ANOVA results. As ANOVA tests solely provide an F-ratio and highlight a significance value that rejects the null hypothesis, it lacks clearer definition of which means are essentially different. As such a range of *post hoc* tests enable the researcher to undertake further analysis on significant ANOVA results to identify different mean scores (Toothaker, 1993). This approach is advocated by Calder (in Sapsford and Jupp, 1996: p251) post ANOVA testing “we do just a single test to find out whether there is sufficient variance between the groups to explain, before trying to locate where it lies.”

Post hoc tests allow the examination of differences in means that may exist post regression or ANOVA statistics. This approach as Field (2005) explains is often predicated on the researcher having little to no specific inferences on collected data but rather seeks to explore the data set *a priori*. *Post hoc* tests undertake pairwise comparisons of different combinations of data values, in essence as Field (2005: p339) simply explains “rather like taking every pair of groups and then performing a t-test on each pair of groups.” It allows further examination to ANOVA results statistically breaking down significant results to provide clearly results on differences in group scores

(Toothaker, 1993). The test provides additional data highlighting the potential groupings of nominal variables against their mean scores.

Table 4.3 Types of Error

A number of multiple comparison procedures or *post hoc* tests can be utilised but vary in their ability to control Type I and Type II errors (Toothaker, 1993) (see table above). These tests provide evidence of statistical groupings between the categorical variables tested.

The *least-significant difference* (LSD) approach is less advisable in its inability to control Type I errors with a single required criterion of significant ANOVA result.

The *Studentized Newman-Keuls* (SNK) lacks similar control procedures (*ibid*).

Bonferroni approach enables adjustment to statistical significant to protect against Type I errors and the likelihood of a ‘false positive’. Unfortunately this approach is prone to more Type II errors where instead a ‘false negative’ has occurred. Both *Bonferroni*’s and *Tukey*’s tests while limiting Type I errors lack statistical power. Field (2005) highlights Bonferroni power and advised usage on small comparisons where *Tukey*’s would fit best in testing large numbers of means. Field (2005: p341) argues that where there is confidence in ensuring equal population variances then *Tukey* tests “have good power and tight control over the Type I error rate.”

Duncan’s multiple range tests looks at ranking groups of means from smallest to the largest which then computes a range statistic from the number of steps that the means are apart (Malhotra and Birks, 2006).

4.6c Factor analysis

Factor analysis enables the researcher to group or summarise information from a large set of variables into smaller segments based upon calculated factor scores. This technique allows the identification of potential groupings within tests variables (Hair *et al.*, 2007). De Vaus (2002: p186) view factor analysis as a form of scale development undertaken through analysis of interval data, reducing a large set of variables “to a smaller set of underlying variables” known as factors. De Vaus (*ibid*) highlights that the approach allows examination and identification of patterns of answers from a set of questions.

These were utilised to identify the existence of managerial archetypes or factors within UK universities.

4.7 Interview research phase

The study undertook a semi-structured interview approach in collecting qualitative data in the final phase of the data collection stages. The approach utilised a structure of key issues and problems as highlighted by questionnaire data analysis but were conducted in a loosely coupled formation. Where a structured interview adhered rigidly to a set question numbering, definition guide and question wording (much like a face-to-face questionnaire), an unstructured interview requires a more liberal and inexact approach utilising solely a range of topics freely discussed with the interviewee (Saunders *et al.*, 2007). A semi-structured approach employs a mix of both interviewing methods and applies loose and free discussion along a range of set questions and topics of the planned interview guide, liberating the interview to take its course but within set constraints and control (*ibid*).

For the purposes of this research both a semi-structured face-to-face and telephone interview approach were utilised. While face-to-face interviews across the board with interviewees would have been preferable, the logistical and expense costs of the approach were unrealistic. As such where possible face-to-face interviews were conducted ranging from between 45 minutes to 1 hour in duration. Telephone interviews adhered to similar timescales and were undertaken with staff members who were geographically difficult to

reach. Moreover since interview transcripts were imported and encoded into the NVivo software package, analyses of interviewees' physical mannerisms were not an issue.

Bryman and Bell (2007) highlight the volume of richer data that can be effectively gathered through interview surveys, but further discuss the extent and magnitude of administrative work that comes as part of interview transcription. Nonetheless it was key for the purposes of this research to undertake additional qualitative research in the form of interviews. This provided the research with further data by which to assess the different issues affecting HE management. Moreover it provided a means to examine staff opinions and perceptions in deeper detail as compared to questionnaire surveys. This final phase of the research enabled a more holistic as well as confirmatory review of the prevalent forces that exist. This is reflective of Berg's (2009) methodology of directed content analysis utilising analytical codes and categories that have emanated from existing theories and explanations that have been drawn from exploratory and quantitative research phases.

4.9 Sampling

The population of any research is defined as the total number of individuals involved and related to the study. As study populations can be very large and logistically and financially unrealistic in the data collection process utilising the methodological approach of sampling could provide representative data without the need to undertake a census (Saunders *et al.*, 2007).

In undertaking sampling methodologies, it is important for the data collected from respondents and the sample group to be representative and as such reflective of the population as a whole. Bryman and Bell (2007) and Hair *et al.* (2007) explain that the collection of any data from a sampled group needs consideration to ensure that the findings and conclusions drawn from the study are both reliable and realistic to true opinions, perceptions and accurate representation. Moreover as the study utilises a mixed methodological approach to a large data set that is reflective of the UK HE sector as a whole, it was important to discount the different available methodologies before a suitable method was selected.

Bryman and Bell (2007), Creswell (2008) and Saunders *et al.* (2007) all detail two ideological approaches to research sampling – the probability sampling and non-probability sampling approaches.

The probability sampling approach utilises a mathematical calculation of randomisation in the selecting of individuals from the population. The main tenet of probability sampling is in its approach that ensures every individual in the population has an equal chance of being sampled for the research (Bryman and Bell, 2007). In order to ensure this equality in respondent selection, the use of probability sampling requires an accurate and clear sampling frame. A sampling frame is a complete listing of individuals within the population from which a sample can be drawn.

Probability sampling can take the form of a number of methods. A simple random sampling approach utilises computing software or other methods to select ‘at random’ individuals or cases from the sampling frame to include within the study (Bryman and Cramer, 1990).

A systematic sampling approach utilises similar considerations but selects cases based on an ‘nth’ numbering methodology (*ibid*). As such cases are selected from the sampling frame at predetermined gaps (Saunders *et al.*, 2007).

An alternative to these two methods is the stratified sampling approach, where the sampling frame is broken into naturally occurring groups or strata before case selection (Saunders *et al.*, 2007). Bryman and Cramer (1990) state that these strata need to exist as categories of a criterion such as gender or perhaps departments within a firm.

The probability sampling approach prides itself on ensuring a true random sampling selection of cases and potential respondents from the population. Moreover as an accurate sampling frame is utilised and every case has an equal chance of selection, there is increased reliability in overall data collection (*ibid*). It further ensures a more representative and reflective sample of the total population.

The second approach to sampling is that of non-probability methods. These approaches do not require the use of a sampling frame and as such tend to be easier to administer. The

approach unfortunately does not ensure that every case or individual in the population has an equal chance of being selected (Saunders *et al.*, 2007).

The most common forms of non-probability sampling are that of convenience and quota sampling, where individuals from the population are selected through ease of access or through meeting a predefined quota (Marshall, 1996; *ibid*).

Other approaches include snowball and purposive sampling. Snowball sampling involves the jumping or 'snowball' of cases or researched individuals through movement from one contact to another and so forth. The approach is commonly utilised in interviewee sampling as additional contacts are achieved through 'snowballing' (Marshall, 1996).

Purposive sampling on the other hand utilises a selection criteria in the sampling process. Marshall (*ibid*: p523) highlights that purposive (or judgement) sampling "actively selects the most productive sample to answer the research question" recognising "that some informants are 'richer' than others" and can therefore provide better and more related insight and understanding.

In essence the method selects cases or individuals based on predefined criteria that match the needs of the research. The method, while not as robust as probability sampling, allows better targeting of potential sample respondents (Saunders *et al.*, 2007). Marshall (1996: p523) suggests a number of approaches to include a broad range of subjects (maximum variation sample), outliers (deviant sample), subjects who have specific experiences (critical case sample) or subjects with special expertise (key informant sample).

4.9a Sampling considerations and selection

The population of the survey was to be all staff members in UK universities. The population did not include auxiliary staff members such as librarians, careers advice and departments not clearly linked to academic delivery and overall university operations. All academic faculties were included together with administrative staff members within these faculties and solely administrative departments.

Consideration of a probability or non-probability sampling approach was undertaken to decide the best methods in the data collection of questionnaire data. While a probability sampling approach would provide the best means to ensure a statistically sound representative sample of university staff members the requirement to possess a reliable sampling frame was impractical. A sampling frame would provide a complete listing of all staff members from both academic and administrative departments in UK universities. Unfortunately access to such information is highly restricted due to data protection and confidentiality. Moreover there would have been no reliable and accurate methodology to ensure that all members of the population were identified and as such had an equal opportunity of being selected. A probability sample approach was dismissed.

As such a non-probability purposive sampling method was utilised to select potential respondents or key informants¹ whereupon requests for completion of questionnaires were sent via email and, if required, by post. This sampling method was utilised due to the inability to compile an accurate sampling frame of potential respondents for probability sampling. Bryman and Cramer (1990) indicate that sampling methodologies need to work within time and resource constraints. The nature of sensitive data and data protection provided impossible logistical considerations in compiling a thorough sampling frame. Although respondents' data were publicly available compiling a sampling frame from available data would not secure a precise sampling frame without erroneous information. Endeavouring to assemble a representative sampling frame from this provided little to no certainty of it being accurate. While a non-probability purposive sampling method may not provide ideal sampling accuracy the range and volume of sampled respondents would impart reliability and representative results of the population. Moreover as respondents are selected based upon criteria and 'purpose', data collected would more accurately reflect the sampled population (Marshall, 1996).

For interview purposes purposive sampling was further utilised in interviewee selection. Utilising Marshall's (1996) critical case samples interviewees from across the range of university types and university hierarchies were selected to provide appropriate and reflective spread of views and opinions. Indeed Marshall (1996) highlights the

¹ Key informants were selected based on their position at the various universities. Consideration of their job and position within university hierarchy was undertaken alongside the exclusion criteria of auxiliary and non essential staff.

incompatibility of probability sampling methods within interviews owing to its small sample groups and complexity of potential responses. He writes “random sampling... [assumes]... the research characteristics are normally distributed within the population. There is no evidence that the values, beliefs, and attitudes that form the core of qualitative research is normally distributed... making the probability approach inappropriate” (*ibid*: p523). Moreover Guest *et al.* (2006) discuss a number of major assumptions in favour of purposive sampling methodologies. They (*ibid*, p75-76) posit that:

- Participants answer independently of one another and as such answers would comprise a coherent domain of knowledge; and
- Assumed participant homogeneity (as product of selection criteria) enables saturation of research findings creating a “fairly exhaustive data set [even] within twelve interviews.”

These assumptions enable purposive sampling to provide both a reflective as well as accurate representation of beliefs and opinions of the larger population.

4.9b Sampling Issues as Part of Online Methodology

Bryman and Bell (2007: p678) indicate a number of sampling issues that arise as a product of online survey usage. They stress the possibility of problems arising due to:

- The existence of more than one e-mail address per respondent;
- The existence of more than one Internet Service Provider (ISP) per respondent;
- A singular computer within numerous users;
- Bias population of more educated, wealthier and younger individuals;
- Lack of sampling frames which are costly to ascertain.

Consideration of these issues was undertaken when deciding upon and embarking on usage of online web surveys. The existence of more than a singular e-mail address and ISP was considered and deemed less of an issue as university staff respondents were essentially only issued with one e-mail address. Moreover the concern over numerous users on a singular computer was circumvented by the existence of password control and access to individual staff e-mail accounts. This ensured that web surveys sent to individual e-mail addresses were only accessible by the targeted recipient. Utilisation of a

purposive sampling methodology further ensured that concerns of population bias and sampling frames were nullified as potential participants were only selected based upon the criteria and needs of the research rather than solely by chance.

While these issues highlight genuine difficulties for any online research study, the approach considerations undertaken by this research provided a means to nullify and circumvent the potential disadvantages highlighted by Bryman and Bell (2007). Moreover as hardcopy questionnaires were utilised as supplementary to online surveys rather than vice-versa, control over web questionnaire administration and delivery ensured that responses collected were not replicated and were only received from the designated individual e-mail address.

4.10 Questionnaire design

The issues highlighted by NVivo were used to inform the questions and themes for the questionnaire survey. The questionnaire essentially encompasses a mix of categorical data, ranking data and scale data, examining factual, perceptual and attitudinal data (Field, 2003; Oppenheim, 2000; Fogelman, 2002). The mix of these types of data would allow more robust tests and analysis to be carried out (Oppenheim, 2000).

Utilising such a range of question types enabled descriptive data to be drawn alongside statistical testing. Nominal sets of questions were utilised to group respondent characteristics to enable analysis of variables based on groupings such as demographics, job position and length of service (Keller, 2006). In addition to nominal questions, ordinal and scale questions were included in the final questionnaire. Ordinal questions allow respondents to rank based on order of importance on a number of issues (*ibid*; Bryman and Cramer, 1990). Harwell and Gatti (2001) highlight the growing need to utilise ordinal scales within the social sciences as a product of the inability to clearer classify variables in the form of other data types. The nature of social science research requires some form of numerical classification of intangible values (Gardner, 1975). Indeed Harwell and Gatti (2001) chart the volume of empirical research undertaken and highlight the fairer usage of ordinal data to match the needs of social scientists and namely those in the field of

psychological and educational research. As such it was worthwhile utilising a range of ordinal questions to illicit responses.

Additionally included within the questionnaire were scale questions requiring respondents to rate how strongly they agreed or disagreed with statements around issues related to the study. While age and length of service would have preferably been collected in ratio rather than nominal form, the sensitivity of these questions would have had an adverse effect on response rates. Oppenheim (2000) indicates that questions such as age and income in specific and highly accurate figures tend to possess a certain amount of inaccuracy and reluctance on the part of respondents to answer truthfully. Inclusion of these questions may have been to the detriment of the survey response rates and questionnaire usability numbers.

While there existed a number of issues not clearly prevalent in the literature and interviews such as length of service and age disparities within the questionnaire, it was decided that these would be included for later testing in the event of potential findings.

The mix of question types facilitated a range of viable statistical tests that would enable the identification and verification of issues as highlighted by survey responses.

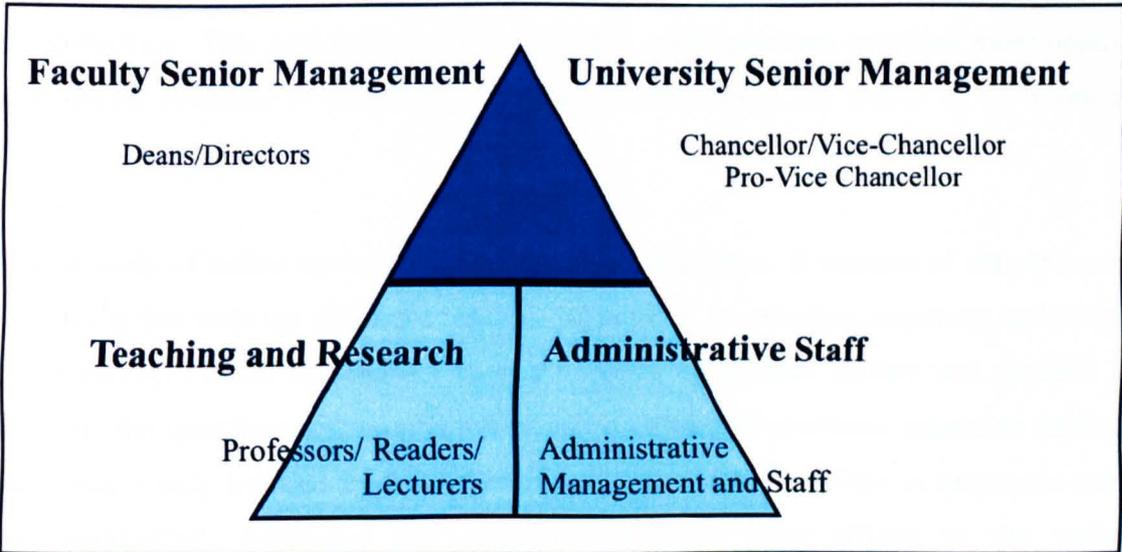
4.10a Questionnaire pilot testing

The questionnaire itself was compiled and tested on staff members within LJMU as well as those from a red brick university to ensure accuracy and validity. Additionally, a number of interviews were undertaken on desk research findings to further ensure valid findings and questions within the questionnaire. The questionnaire stage of the study was conducted through the use of both a hardcopy and electronic questionnaire distributed via post, email and online software. Testing of the questionnaires was undertaken on both the hardcopy and online versions to ensure both continuity and accuracy of data collection of both mediums. Both versions were tested by members of the supervisory team along with staff members within LJMU and a red brick university. A total of 48 online questionnaires were sent out, 18 within LJMU and 18 at a red brick institution. In addition to this, 12 hardcopy versions were also piloted. These were undertaken at LJMU. While the pilot survey consisted of only a small percentage of the total population of the study,

pilots questionnaires were distributed in equal numbers to the different existent staff hierarchies providing a fair spread of opinions of respondents targeted for actual data collection². This provided a means to ensure that the survey instrument was valid and reliable and would meet the needs of the study. A number of issues were highlighted by the pilot testing mainly to do with misunderstanding of question phrasing and ambiguity in a number of questions.

Moreover the existence of a job title in one university was not necessarily mirrored in another providing too wide a range of potential responses. Responses were ultimately grouped into the executive management group, senior management for academia and administration, research and teaching academics and administrative staff. Such categorisation would allow analysis on potential linkages and the examination of hierarchical status of staff members and their respective responses (see figure 4.1 below).

Figure 4.1 Staff members surveyed



Problems were identified with selection of the faculty that staff members worked in. Due to the wide range of faculties in existence in UK universities, the questionnaire was amended to utilise open-answer questions for responses on which academic faculty and which administrative department that respondents operated in. This provided the opportunity to collect more accurate data that would later be post-coded by the researcher, matching job positions to the required hierarchical university groupings.

² These were totals from two rounds of piloting. 18 online and 6 hardcopy questionnaires at each round.

A number of other questions were also amended post pilot testing. These were related to factual answers to questions such as university types and groups. Utilising set answers increased the likelihood for potentially false and incorrect responses. The options of new, red brick, plate glass and ancient university were considered but after testing consideration of an open question with respondents stating the name of the university were piloted as a viable outlet to uncertainty on university age. As university groupings were based upon age of establishment, which was based upon either Royal Charter or Acts of Parliament and could have potentially provided misleading responses, it was decided that the best approach was not to utilise a question requiring respondents to tick their university type but rather to provide an open question for respondents to name their university allowing factual answers to be accurately ascertained later. This provided the researcher with the ability to clearly identify the groupings of the university. Post coding of university names allowed for increased accuracy as responses were precisely classed into their respective groupings based on clear age of establishment from external sources of information. This post coding approach of the open questions provided more control and ensured accuracy of university groupings, which was a key aspect of the research study.

A pilot study of online survey methods was also undertaken. A number of simple issues were identified with the piloting to include difficulties in selecting responses and length of the survey. Piloted respondents wanted to know how much further was required to complete the questionnaire. In addition to this a number of problems related to ranking questions, mainly induced by the online programmes over flexibility in responses were also highlighted. Additional and clearer instructions were affixed to the online questionnaire, including more eye-friendly colour schemes to ensure visibility of answer boxes. A status box indicating the length and percentage of the questionnaire completed was also included.

A number of questions were also disarranged in the online questionnaire and were reformatted to be in line with hardcopy versions.

Grammatical and spelling corrections were undertaken alongside a review of structure and design feasibility. Discussions with the supervisory team on the themes incorporated

from earlier qualitative research were also undertaken and viability scrutinised before inclusion into the questionnaire. Both online and hardcopy questionnaires were then distributed to staff members at LJMU and other universities. Individuals were selected based on similar respondent profiles and characteristics as actual target populations for the finalised questionnaire. This allowed for changes and issues highlighted being reflective of the target population and any necessary alterations to be effectively made. These modifications would ultimately cater more accurately to the concerns of the wider response group.

The pilot study stage also identified a difference between online and hardcopy survey completion times. This was reflected in different completion times provided on online and hardcopy questionnaire pages. Online questionnaires required 15 to 25 minutes to complete as compared to hardcopy versions, which took 15 to 20 minutes (see figure 4.2 for the pre-piloted questionnaire and figure 4.3 for finalised questionnaire post piloting). For a full list of amendments see table 4.4 below.

4.10b Additional piloting

To ensure further accuracy of the survey instrument, two interviews with UK university staff members were also undertaken to examine the effectiveness of the questionnaire with regard to attaining all relevant data. The exploratory nature of these interviews was to inform and validate the structure, design and context of the questionnaire items, providing a forum for discussion. These were undertaken with two members of staff at differing positions within LJMU, one at research and teaching level and another at senior management level. The semi-structured interviews were conducted with the pilot questionnaire in hand and took between 30 to 45 minutes to complete. This was to enable the researcher to test the effectiveness of the questionnaire and to determine if response options were sufficiently represented in real world settings. Interviewees were further asked for their opinions of the themes and issues covered within the questionnaire and if they felt other issues could be included. It is important to note that this stage was undertaken as a supplementary process to check the validity of the questionnaire. Given that the pilot study had been previously undertaken in red brick and new institutions and had been positively accepted, as a final check on content these interviews were held.

Overall the interviewees highlighted a simple spelling mistake that was missed during the earlier piloting process and were satisfied with the range of response options provided within the survey. Given this double-check further interviews were not deemed necessarily. For a full list of amendments see table 4.4 below.

Table 4.4 List of Amendments to Questionnaires

Issues	Changes
Categorisation difficulties in terms of position at university	Altered into an open question, for ease of response. Post coding undertaken by the researcher for increased accuracy
Categorisation difficulties in selection of academic faculty	Altered into an open question, for ease of response. Post coding undertaken by the researcher for increased accuracy
Categorisation difficulties in selection of administrative departments.	Altered into an open question, for ease of response. Post coding undertaken by the researcher for increased accuracy
Removal of question with closed answer choices for respondents to select university groupings	Modified into an open question. Additional coding and analysis of factual data through classifying and arranging open answers based on external sources of information.
Online questionnaire lacked sufficient clear instructions.	Included additional clearer instructions
Colour of online questionnaire obscured answer boxes	Colour theme and background modified
Lacked completion status box	Added percentage complete box
Differing questionnaire completion times for online and hardcopy versions	New completion times provided on cover page of both versions
Simple spelling mistake	Corrected

Figure 4.2 Pre-pilot questionnaire

Q1. What is your current position/job specification at your University?
 (Please tick the option that is closest to your position)

- | | | | |
|-----------------------------|--------------------------|----------------------------|--------------------------|
| Vice-Chancellor | <input type="checkbox"/> | Pro- Vice Chancellor | <input type="checkbox"/> |
| Dean | <input type="checkbox"/> | Registrar | <input type="checkbox"/> |
| Director of Schools | <input type="checkbox"/> | Professor | <input type="checkbox"/> |
| Reader | <input type="checkbox"/> | Senior Lecturer | <input type="checkbox"/> |
| Lecturer | <input type="checkbox"/> | Principal Lecturer | <input type="checkbox"/> |
| Researcher | <input type="checkbox"/> | | |
| Staff Manager | <input type="checkbox"/> | Head of Department (Admin) | <input type="checkbox"/> |
| Administrative staff member | <input type="checkbox"/> | | |

Q2. For academic staff, please select which academic faculty that you fall under? *(Please tick the option that best fits you)*

- | | | |
|---|--------------------------|-------------------------|
| Faculty of Business and Law | <input type="checkbox"/> | Other: _____ |
| Faculty of Health and Sciences | <input type="checkbox"/> | <i>(please specify)</i> |
| Faculty of Education | <input type="checkbox"/> | |
| Faculty of Engineering/Environment/Technology | <input type="checkbox"/> | |
| Faculty of Media, Arts and Social Sciences | <input type="checkbox"/> | |

Q3. For administrative staff, please select which administrative department do you fall under? *(Please tick the option that best fits you)* Note: *Academic staffs please ignore this question*

- | | | | |
|-----------------|--------------------------|-------------------------------|--------------------------|
| Human Resources | <input type="checkbox"/> | Office of the Vice Chancellor | <input type="checkbox"/> |
| Development | <input type="checkbox"/> | General Administration | <input type="checkbox"/> |
| Marketing | <input type="checkbox"/> | Infrastructure | <input type="checkbox"/> |
| Finance | <input type="checkbox"/> | Other: _____ | |
| Delivery | <input type="checkbox"/> | <i>(please specify)</i> | |

Figure 4.3 Post pilot questionnaire

Q1. Please tick the option that BEST describes your position at the University (*tick one only*).

- | | | | |
|---|--------------------------|---|--------------------------|
| Faculty Senior Management
<i>(Dean/Director /Subject Group Leaders)</i> | <input type="checkbox"/> | Professor/Reader
<i>(research related)</i> | <input type="checkbox"/> |
| University Senior Management
<i>(Chancellor/Vice-Chancellor/Pro-vice
Chancellor/Rector/Directorate Member/Registrar)</i> | <input type="checkbox"/> | Lecturers/ Senior Lecturers/
Principal Lecturers <i>(teaching related)</i> | <input type="checkbox"/> |
| Administrative Management | <input type="checkbox"/> | Administrative Staff | <input type="checkbox"/> |

Q2. Please tick if you are a faculty or non-faculty based member of staff (*tick one only*)

- Faculty based staff member
- Non-Faculty based staff member

Q3. If you are faculty based please state the name of the faculty you work under. (*Ignore if non-faculty based staff member*)

Q4. If you are a non-faculty based member of staff, please state which department you work under. (*Ignore if faculty based staff member*)

Q5. Please state the name of the University you are currently working for.

4.10c The final questionnaire

The questionnaire was divided into 5 Sections (A – E) to control respondent focus and reduce difficulties involved with data entry. The mix of data and question types in separated sections was undertaken to ensure more diversity with the questionnaire further providing a means to not only cross examine findings but create a less monotonous environment for the respondent with an aim to improving completion rates (Oppenheim, 2000).

Section A consisted mostly of categorical or nominal (Bryman and Cramer, 1994; Field, 2003) questions related to the institution where the respondent is employed. These questions were aimed at not only comforting the respondent with ‘welcoming’ simple introductory questions (Oppenheim, 2000) but allowed “classification of individuals in terms of a concept” (Bryman and Cramer, 1994: p65) through the use of simple, factual questions related to the individual.

Section B contained questions related to the respondents department and issues related to the external links of universities and their stakeholders.

Section C consisted of ranking questions (Bryman and Cramer, 1994; Field, 2003; Oppenheim, 2000) examining the items related to management practices, university purpose, funding and government policies.

Section D comprised of questions relating to the different issues highlighted in exploratory research to include commercialisation of HE, management changes, change in University focus, and financial considerations. Questions took the form of Likert scales and ranged from 1 to 5 with a sixth option of ‘Don’t Know’ as averred by Oppenheim (2000).

Section E focused mainly on categorical data relating specifically to the respondent. It was envisioned that correlations of data collected could be examined in the context of the individual’s specification. A number of nominal or grouping questions such as age group, length of service and gender were also included within the questionnaire to provide additional information that may uncover unknown differences and issues. Open questions

were also included in this section. These were utilised as a platform and presented a further avenue for respondents to freely voice their opinions and other responses (Crano and Brewer, 2002).

A 'Contact for Interview' column was also included to seek participation of respondents for the interview stage of this research. This increased and improved potential interview participation rates.

These sections were mirrored in the online questionnaire. As discussed earlier, usage of online surveys allowed for efficient delivery of questionnaires as well as potentially being able to reach a wider target audience and in turn promote a better response rate. Nonetheless considerable consultation of the Data Protection Act had to be undertaken to ensure compliance and integrity of private and sensitive information (DPA, 1998; ICO, 2007).

Additionally both hardcopy and online questionnaires included a consent form. It was decided that a required signature was to be replaced with an 'agree/disagree to participate' option to improve confidentiality (A questionnaire pack can be found in Appendix 3).

4.10d Ethical design

Both online and hardcopy questionnaires were required to adhere to strict ethical and confidential considerations.

Informed consent was undertaken through both a cover sheet communicating the focus and rationale behind the research together with how findings were to be utilised. Respondents were given researcher and supervisory team contact details in order for them to forward any other queries or uncertainties they may have. Participants were informed on the nature of the research and its focus on their university setting nullifying any concerns over deception. In addition to this, before staff members in the various universities were contacted, emails seeking permission to contact them were sent to managers and departmental heads. Participants were selected based on the sampling methodology discussed in chapter 4.9 and were also informed of their right to leave and discontinue their engagement with the research at any time, at which point all data and

personal details collected would be destroyed. This is in line with the ethical consideration highlighted in chapter 3.18a and 3.18b. .

On completion of the questionnaire respondents were to return the surveys within the pre-paid envelopes provided. To ensure security collected questionnaire returns were kept securely with the researcher, and any personal details that could indicate the identity of the respondent kept separate from the questionnaire once the required data had been entered into SPSS.

Respondent confidentiality was further carefully adhered to, ensuring that no personal details of any of the participants were leaked or accessed by another party outside of the supervisory team. Staff details were kept separate from questionnaire responses and interview scripts were cleared of any names and links to institutions and other members of staff. Staff details were only kept from questionnaires with responses highlighting the respondents' willingness to participate in further interview sessions.

Online questionnaires posed a different approach in ensuring ethical data collection. Responses collected via the SurveyMonkey website are securely stored online, requiring a secure password to login. Moreover as SurveyMonkey utilises industry standard security and privacy settings (Secure Sockets Layer or SSL), responses collected are private and safely kept. Moreover respondents had the opportunity to opt-out of the research study through a link provided by SurveyMonkey. Electronic copies of downloaded responses were kept solely on the researcher's university computer and personal laptop, both of which are used only by the researcher and password protected. These files are kept securely in these two locations, with any personal respondent details deleted once imported into SPSS.

Consultation with LJMU's Data Protection Officer was further undertaken to ensure adherence to appropriate security and confidentiality practices. This is in line with considerations discussed in chapter 3.18a and 3.18c to ensure that responses are kept confidential and do not cause unnecessary embarrassment or discomfort to respondents.

4.10e Data Protection over the Internet

One of the major issues with usage of online questionnaires is with adherence to data protection requirements. The Data Protection Act of 1998 requires that data be securely and privately kept, further ensuring that any provided information is used solely for the purposes as described when it was collected. In addition to this any data that risk leaking the identity of respondents must be zealously protected with a further option for respondents to exercise their right to withdraw their participation, wherein all information linked to them is destroyed.

It was key for the researcher to ensure that SurveyMonkey adhered to data protection considerations and that all data collected was secure and private. In addition to this, access to raw questionnaire data was restricted to the researcher and members of the supervisory team minimising the risk of data leak and breach of confidentiality.

4.11 Interviews

12 interviews were the minimum required to ensure a viable quorum of interview data collected from up and down the university hierarchy and existing university types. The 4 types of universities and 3 distinctive university hierarchies required 12 interviews to clearly reflect all relevant issues for the purposes of this study. As such a member from university senior management, teaching and research and administrative groups were selected from each university type. A total of 3 interviewees from the 3 different hierarchies were selected from ancient, red brick, plate glass and new universities.

The interviews ranged from 45 minutes to 1 hour in duration and were conducted through face-to-face and telephone interviews. Where possible a face-to-face interview was undertaken with the conversation recorded to be later transcribed. Due to geographical and logistical limitations telephone interviews were similarly undertaken with conversation recorded.

Interviews were structured based around the findings in phases 1 and 2 of the research study. Question themes were drawn from findings within the exploratory research phase as highlighted in the literature. In addition to this, findings from the questionnaire survey

were incorporated to delve deeper into the differences that exist between the different university typologies and staff groups.

The interview recordings were transcribed into Microsoft Word, which were then sent to interviewees for ratification. Corrections were undertaken on interview transcripts followed by importing into NVivo. The transcripts were then coded through the use of semi-inductive paradigms. These findings were compared to questionnaire and desk research findings to provide for triangulation of data ensuring increased accuracy, reliability and validity of data.

4.11a Interview ethics

Interviews were undertaken through both telephone and face-to-face methods with a range of individuals from different university types and staff positions. In order to ensure that sufficient ethical considerations were adhered to, access to interview data was limited to the researcher and members of the supervisory team. Only 2 external individuals were required to have access to this data. The two individuals were transcribers charged with transcribing recorded interview conversations into Microsoft Word. Both were briefed on confidentiality and were further provided with additional information on how to proceed accordingly. Transcription work was undertaken within university premises and supervised by the researcher. No interview data left the supervision of the researcher with all collected data securely stored within the researcher's university computer and personal laptop.

In order to ensure that all collected data represented clearly the message conveyed during the interview without misrepresentation, the transcribed conversations were sent to interviewees for ratification. Upon receipt of finalised transcripts, all identifying information was removed. This is to ensure that university and person names were omitted to ensure confidentiality.

4.11b Validity

To ensure a valid and reflective interview data collection process, staff members from across the range of staff positions were selected for interviews. As such an individual

from each hierarchy or staff group was selected for interview. Similar to questionnaire respondents, interviews were undertaken with senior or upper university management, teaching and research staff and administrative staff. In addition to this, the range of staff members was to be interviewed from across the different university types.

Interviewees were selected from individuals who had highlighted their interest in participating in the research during questionnaire completion. Through purposive sampling, individuals meeting the required criteria and interviewee profiles were surveyed.

4.11c Protocols

Interviews were conducted both face-to-face and over the telephone. While there are numerous benefits to each method, to ensure consistency and accuracy of data collected a number of interview protocols were constructed. These provided a standardised approach to the interview process, thus ensuring that all required data was collected. However, as interviews were semi-structured in design a certain amount of flexibility was provided to the interview process. Pre-decided question themes and issues were drawn upon during the interview process but allowing the researcher to delve deeper and probe into any issues that may arise. Utilising a set question script and themes for enquiry, this allowed for more consistency and related issues to be examined during the interviews.

In addition to this, the interviews were to last a maximum of an hour in length, to ensure that unnecessary discussion remained minimal.

Moreover interview timings and questions were piloted with volunteer members of staff to ascertain the approximate length of the interview and if question themes provided sufficient flow of discussion. Results from the pilot indicate that a time range of 45 minutes to 1 hour provided ample and adequate time to completely examine the required issues with additional interview overrun factored into consideration. One of the key issues highlighted during the pilot was to ensure that a certain amount of informal chatting early in the beginning of the interview was required to calm nerves and create a rapport between interviewer and interviewee. This 'relaxed' environment provided a more free flowing discussion.

4.11d Accuracy

In order to further adhere to ethical conduct and accuracy, interview transcripts were sent to interviewees for ratification and correction of any errors ensuring that analysis and communication of findings were based on authenticated data. This is in line with considerations discussed in chapter 4.11 and 4.11a, further enabling more valid conclusions to be ascertained.

4.12 Methodology and method conclusion

This chapter has sought to identify appropriate philosophical approaches utilised for the purposes of this research. It has examined the different available methodologies, paradigms and approaches and has viewed the pragmatist philosophy, inductive-deductive paradigm and survey approach as methodologies that match the needs and characteristics of this study.

In addition to this, the scope and aims of this research have warranted usage of mixed methodological data collection techniques to collect information that is not only valid and within ethical consideration but that can provide for meaningful and accurate findings to be drawn. The chapter has further highlighted the development of the stages and phases of the research study examining the different limitations and considerations that were required and undertaken in employing these techniques.

Ultimately the chapter has discussed the merits of the utilised methodologies and methods and the development of online technologies for data collection alongside consideration of ethical and logistical issues while simultaneously ensuring the validity and reliability of the data collected. It is hoped that the chapter has provided a clear picture and explanation of the approaches of this research with due consideration of potential barriers to success.

Chapter 5.0 Findings.

5.1 Introduction

This chapter details the findings of the different research phases utilised in achieving the aims and objectives of this study. The chapter begins by examining the findings of the qualitative exploratory desk research phase undertaken utilising the NVivo qualitative analysis software package. This section of the chapter identifies the existence of different external forces and its impact on current management structures, which were incorporated into the next phase of the study. This phase utilised an inductive methodological approach and sought to build theories and concepts around the area of this research. A representation of different issues related to the area of university management was also identified in this section.

The next part of the chapter examines the findings drawn from the quantitative questionnaire phase of the research. This began with an examination of respondent demographics and responses of different universities. This sought to highlight a fair and representative sample of questionnaire respondents. Response rates are also detailed here. In addition to this, descriptive questionnaire results are also discussed alongside more rigorous statistical tests, which are aimed at identifying potential casual linkages, differences in levels of agreement and factor groupings. This section of the chapter presents descriptive frequency data to validate issues of reliability and generalisability of the collected data alongside examination of response rates and spread of responses. Analyses of findings here were undertaken through SPSS where a range of descriptive and inferential statistical tests was conducted. Statistical findings of a range of tests to include multiple correspondence analyses (HOMALS), One-Way Analysis of Variances (ANOVA), bivariate tests of correlation, and factor analysis are additionally presented in this section.

The final section of the chapter examines the findings of the final qualitative interview phase of the research. This was undertaken on staff members from the different staff groups and was aimed at uniting findings from both the first exploratory qualitative phase and quantitative results with a more detailed understanding of issues. As highlighted in the methods chapter of this study, interviews undertaken were between 45 minutes to 1 hour and imported into NVivo where identification of recurring themes was conducted.

This final phase of the research study sought to build on the theories identified in the exploratory qualitative phase and quantitative questionnaire stages. Interview findings are discussed based upon positions within the universities and then upon the varying university types, enabling a discussion of results and identification of issues based upon university groupings followed by an examination of matters across the different university hierarchies.

Ultimately this chapter aims to report the findings and results of the different qualitative and quantitative phases of this research seeking to provide a representative interpretation of current views and opinions on the area of university management. It is hoped that through a mixed methodological approach a more accurate and holistic picture of issues affecting university management can be identified. Moreover this section seeks to describe the findings of this research with the aim of fulfilling the objectives of the study.

5.2 Qualitative Stage 1

A survey of secondary data was undertaken for the first exploratory research phase of the study. The approach undertook a wide analysis of published journals and government publications utilising the NVivo software package. This was undertaken in order to achieve a better understanding of the different issues prevalent in the UK HE sector and internationally. This provided a background understanding as well as a means to explore the wider issues that affect HE. Phase 1 of the study provided a means to identify the key and prevalent issues to build into phase 2 of the research.

This section details the different findings achieved in this exploratory stage of the research as well as indicating the major themes as highlighted by the literature and secondary data.

5.3 Qualitative Findings

The exploratory phase of the study highlighted numerous issues that affected the changes in management and management structures in HE within the UK. Numerous coding and nodes were identified through the NVivo packages where recurring themes became the

key focus. Utilising Berg's (2009) conventional content analysis the findings below were drawn from the data.

It was important to highlight the key findings from the exploratory research phase as it provided not only structure to phases 2 and 3 of the study, but displayed consistency in thought through the research phases. As the methodology of the study sought to utilise exploratory literature reviews to inform questionnaires, which in turn informed interviews, it was important to display the findings of phase 1. These were key to setting the scene and structure for the research as well as uncovering the recurrent themes within the external environment.

The findings in this stage of the research revealed a number of key issues that affect management within universities and ultimately identified five major environmental forces (see figure 5.1).

The five major themes or issues that were constantly prevalent were classified as:

- Political Forces;
- Managerialism;
- Welfare;
- Commercialisation;
- Funding;

5.3a Political forces

A review of published work identified numerous issues surrounding the management of HE within the UK and globally. Within the UK a large majority of issues and recent literature focused upon political changes since the 1960s and fluctuating policies that were introduced since. Of the political forces that were detailed within this exploratory phase were opinions and perceptions based on both the positive and negative aspects of politics. There was discussion upon the different government initiatives, policies and Acts that have changed both the face of HE in the UK and been a catalyst to management structures in universities.

Figure 5.1 External forces affecting university structures.

5.3b Managerialism

Another major issue throughout this exploratory phase was related to the effects of managerialism and its permeation into HE management and goals. The negative effects were strongly documented alongside changes in management orientation as a result. The introduction of managerialistic techniques and private sector ideologies were prevalent arguments under the key issue of managerialism. Moreover there was increased focus on accountability, productivity and effective management of resources.

5.3c Welfare

Another theme that was constantly discussed dealt with issues related to the welfarist idea and resulting social benefit of quality education, learning and research. This area highlighted a keen focus on ensuring that university learning remained focused upon education rather than profitability and financial viability. There was further a need to remain focused on education whilst resisting total assimilation of managerialism into HE.

Discontent with regards to the introduction of top-up fees was also recorded in NVivo coding.

5.3d Commercialisation

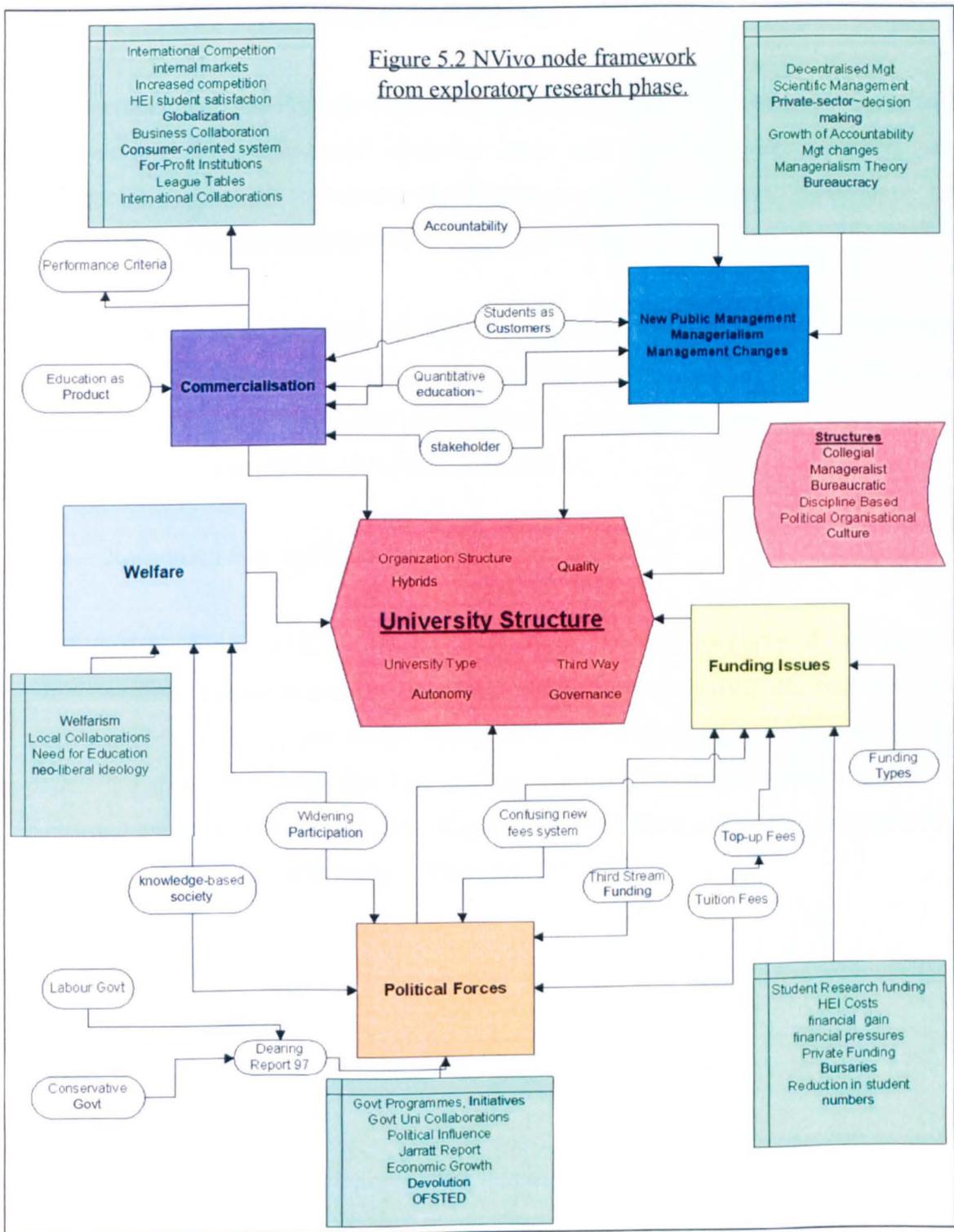
The commercialisation of higher education and the increased tendency for universities to be focused upon achieving profitability and market-orientation was another issue that was constantly identified in NVivo analysis. The growing tendency for competition and marketing of courses and pressure to improve student numbers is indicative of issues within this central theme of commercialisation.

Other issues that were identified included the transition of academics towards more managerial and administrative roles together with the changing focus and mission of universities. Moreover issues related to increased marketing and commercialisation of education together with the influx of local and foreign university competition were also identified.

5.3e Funding

Another recurring issue that caused change within university management was strongly influenced by funding mechanisms. Changes in funding amounts amidst growing student numbers, reductions in government funding and competition for research funding were some of the common issues identified. This research stage further revealed issues relating to funding arrangements from both the government and other sources, highlighting various strains and difficulties in attaining adequate funding.

This exploratory phase of the research study, ultimately uncovered a number of external forces that can and do affect higher education structures. These issues were coded in NVivo and grouped into major themes and its respective effects on university management structures. A framework model of NVivo nodes can be found in figure 5.2 below (See Appendix 4 for full NVivo node listings).



The issues identified in this phase of the research were used to inform the quantitative questionnaire design and administration in stage 2.

5.4 Quantitative questionnaire findings stage 2

This section details the findings from the questionnaire stage of this study. It begins with an overview of questionnaire response rates and respondent demographics and frequencies. It goes on to examine the frequencies of staff responses based upon the different questions and statements within the questionnaire.

Statistical analysis in the form of HOMALS tests identifying potential relationships between variables alongside bivariate tests are further detailed in this section. Moreover ANOVA tests and subsequent *post hoc* examination are also discussed alongside factorial analysis of interval questions within the questionnaire.

5.4a Response rates and respondent demographics

Staff members from all UK universities were surveyed for the purposes of this research excluding those that were auxiliary to primary university operations. Questionnaires were distributed via hardcopy and online resources to 102 participating universities. Of the population of 102 institutions that were selected responses were received from 74 of them constituting a response rate of 72.5%. Figure 5.3 below displays the range of responding universities during the questionnaire phase of the research.

Figure 5.3 Range of University Responses

Returns	
Aberdeen	1
Abertay	6
Aston	4
Bath	4
Bedfordshire	3
Birmingham	1
Bournemouth	5
Bradford	7
Brighton	1
Bristol	6
Brunel	4
Cambridge	4
Cardiff	4
Central England	1
Coventry	2
De Montfort University	9
Derby	3
Dundee	5
Durham	1
East Anglia	3
East London	3
Edge Hill	4
Edinburgh	3
Essex	5

Returns	
Exeter	5
Glamorgan	7
Glasgow	10
Gloucestershire	10
Heriot-Watt	2
Hertfordshire	7
Huddersfield	6
Hull	7
Keele	8
Kent	2
Kingston	6
Lancaster	2
Leeds	8
Lincoln	2
Liverpool	3
Liverpool Hope	6
LJMU	12
Loughborough	3
Manchester	1
Manchester Metropolitan University	3
Middlesex	5
Napier	5
Newcastle	6
Northampton	8
Nottingham	10

Returns	
Oxford	5
Oxford Brookes	6
Paisley	4
Paisley University	2
Plymouth	4
Portsmouth	5
Queen Margaret University Edinburgh	4
Queens University Belfast	11
Reading	2
Sheffield	4
Sheffield Hallam	2
Southampton	3
St Andrews	1
Staffordshire	3
Stirling	1
Strathclyde	3
Sunderland	1
Surrey	7
Sussex	1
Thames Valley	2
University of London	2
Warwick	2
Westminster	2
Winchester	3
Wolverhampton	1

Moreover as 12 questionnaires were sent to each university to meet a reflective quorum it was imperative that sufficient numbers of responses were gathered to improve the validity of data collected across the sector. Of the 1224 questionnaires³ administered a total of 314 usable returns were received providing an overall usable response rate of 25.7%.

With a sector wide participation rate of 72.5% and a questionnaire response rate of 25.7% it is argued that the results of the study are reflective of the population and UK university sector as a whole. Table 5.1 below highlights the questionnaire volume distributed and the respective returns from the different university types.

Table 5.1 Questionnaire distribution and response rates

Type of University	Number of Universities in Group	Questionnaires Distributed	Number of Responses	Response Percentages
New University	55	660	151	48.1%
Plate Glass University	23	276	62	19.7%
Red Brick University	18	216	74	23.6%
Ancient University	6	72	27	8.6%
Total	102	1224	314	100%

It can be seen that while a higher response rate would have been advantageous; given the scope and nature of the research of UK universities a lower end response rate of 8.6% to a higher value of 48.1%, a sizeable and reflective questionnaire response was received. It was important to ensure that the collection of questionnaire data covered a range of university typology. This, once again, would provide responses that are reflective of the population and that statistical results would provide conclusions that can accurately mirror and indicate the issues existent within the differing university groupings, given the number of universities that exist within the typology (see column 2 in table 5.1). The number of responses displays a fair and reflective proportion of different university types indicative of the existing university ratios. The frequencies coincide with existing numbers of university types with ancient universities being the smallest grouping, following by red brick and plate glass universities, ultimately ending with the largest grouping of new universities (see table 5.1).

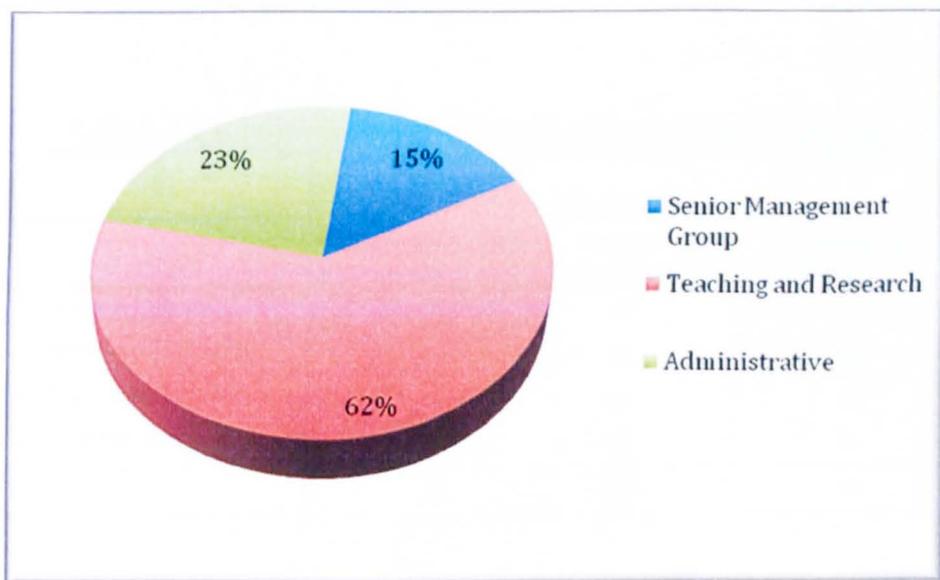
In addition to this as a range of staff members were surveyed, it was important to ensure a considerable and consistent number of responses from the different university positions.

³ 12 questionnaires were sent to each institution. The total of 12 questionnaires multiplied by 102 institutions equals to 1224.

This was crucial in ensuring that while the data collected reflected UK universities, the responses would also be reflective of staff positions and demographics.

Responses based on staff positions also provide a picture that is reflective of the HE sector and UK universities. While it would have preferable to attain higher response rates from the ‘Senior Management Group’ it was understood that access to individuals at this level in the university would be highly restricted and limited. Based on the collected figures, the senior management group effectively constituted 15% of the survey, with teaching and research staff at 62% and administrative staff members at 23%. To a large degree this corresponds proportionately to the current staff ratios existent in universities (see HEFCE, 2007b), although a larger response rate from administrative staff would have been worthwhile (see figure 5.4).

Figure 5.4 Percentage spread of responses by staff groups



Other staff member demographics such as gender, age and length of service at their respective universities were also collected to identify if differences in questionnaire responses existed out of differing demographics. Table 5.2 below displays the percentages of respondent demographics.

Table 5.2 Breakdown of questionnaire responses.

Gender		Length of Service		Age Groups	
Male	52%	<1year	17%	<25 years	.3 %
Female	43%	1 to 5 years	26%	26 to 35 years	15%
		6 to 9 years	14%	36 to 45 years	25%
		>9 years	50%	>46 years	53%

A cross-tabulation of questionnaire responses based on university type and staff positions further indicate a fair spread of ratios. Unfortunately there was a shortage of respondents from university senior management level from ancient universities. Given the limited number of ancient universities this figure is thought to be reflective. The figures display a reasonably fair spread of questionnaire responses.

Table 5.3 Cross-tabulation of university type against staff groups.

		Position at University		
		Senior Management Group	Research and Teaching staff	Administrative Group
Type of University	Ancient University	2	12	13
	Red Brick University	16	41	17
	Plate Glass University	5	45	12
	New University	24	96	31
Total		47	194	73

5.4b Descriptive findings

The following section communicates the different descriptive findings of the questionnaire survey. Please note that these solely display the spread of responses collected in the different nominal questions. These have not been statistically tested for associations but are merely displayed to provide a descriptive view of findings. While chi-square tests of association could have been undertaken, insufficient cells counts would have lead to unreliable results. As such chi-square tests were excluded.

Table 5.4 Cross-tabulation of university models against university type

		Type of University				
		Ancient University	Red Brick University	Plate Glass University	New University	Ancient University
University model/structure	Collegiate based model	5	7	1	12	25
	Bureaucratic based model	6	15	13	54	88
	Managerial based model	7	20	15	52	94
	Discipline based model	4	19	17	9	49
	Political Organization pattern	1	5	7	12	25
	Organized Anarchy	2	1	2	4	9
	Don't Know	2	5	7	8	22
Total		27	72	62	151	312

A cross-tabulation of university structure and university type (see table 5.4) revealed the largest percentage of respondents from all universities selecting the managerial based model (30.1%). Interestingly staff members at new universities had the highest frequency for the collegial (3.8%), bureaucratic (17.3%) and managerial (16.7%) based models. Ancient universities on the other hand had almost equal frequencies of collegial (1.6%), bureaucratic (1.9%) and managerial (2.2%) based models. Red brick universities also selected the managerial based model (6.4%) as their most common university model.

Table 5.5 Cross-tabulation of current management style against university type

		Type of University				
		Ancient University	Red Brick University	Plate Glass University	New University	Ancient University
Current Management Style	Allows for personal autonomy	10	21	16	29	76
	Highly bureaucratic	5	14	15	32	66
	Haphazard	6	8	8	19	41
	Focus on accountability	0	5	4	14	23
	Focus on managerialist practices	6	26	14	50	96
	Don't Know	0	0	5	7	12
Total		27	74	62	151	314

A cross-tabulation of current management style and university type (see table 5.5) was also undertaken to examine frequency of responses based on these groupings. Ancient universities selected a management style that allows for personal autonomy as their most frequent (3.2%). This is echoed by plate glass universities with a frequency of 16

responses (5.1%). Where the ancient university has lower frequencies for focus on managerialist practices, all other university types have a high response rate on the managerialist option (28.7% in total). It is also worthwhile to note that the most common response from staff members at red brick (8.3%) universities and new universities (15.9%) was this option. Interestingly the younger institutions of plate glass (1.6%) and new (2.2%) universities had responses in the 'don't know' option, in comparison to older red brick and ancient universities where no responses were recorded in this option. Overall the majority of responses from all universities were that their university focused upon managerialist practices (30.6%) followed by a management style that allows for personal autonomy (24.2%).

Table 5.6 Cross-tabulation of current management style against staff positions

		Position at University						Total
		Faculty Senior Mgt	University Senior Mgt	Admin Mgt	Professor/Reader	Lecturers	Admin Staff	
Current Management Style	Allows for personal autonomy	11	0	8	14	34	9	76
	Highly bureaucratic	8	1	5	14	31	7	66
	Haphazard	6	0	5	4	22	4	41
	Focus on accountability	6	2	2	0	11	2	23
	Focus on managerialist practices	10	1	17	15	41	12	96
	Don't Know	2	0	0	3	5	2	12
Total		43	4	37	50	144	36	314

A cross tabulation of current management style and staff positions at universities was also undertaken to examine if there were differences in style as perceived by different individuals working within these institutions. From table 5.6 it can be seen that lecturers within the universities considered the current management style to be mostly focused on managerialist practices (13.1%). This is a choice similarly shared by university professors and readers (4.8%) and members of administrative management (5.4%) and staff (3.8%).

Staff members at the faculty senior management level more frequently selected the option that highlighted a style that allows for personal autonomy (3.5%), followed closely by an approach that focuses on managerialistic practices (3.2%). The majority of responses highlighted a focus on managerialist practices (30.6%) followed by a style of management that allows for personal autonomy (24.2%).

5.4b.1 University models, purpose and management style.

A key objective of this research was to identify the differing university models existing within the UK HE environment. Utilising data collected in the first qualitative review phase of this study, a number of university models were established for use in the questionnaire phase. Figure 5.5 highlights the responses provided by staff members on the current university management model in place.

Figure 5.5 Frequency responses on university model/structure (n=312).

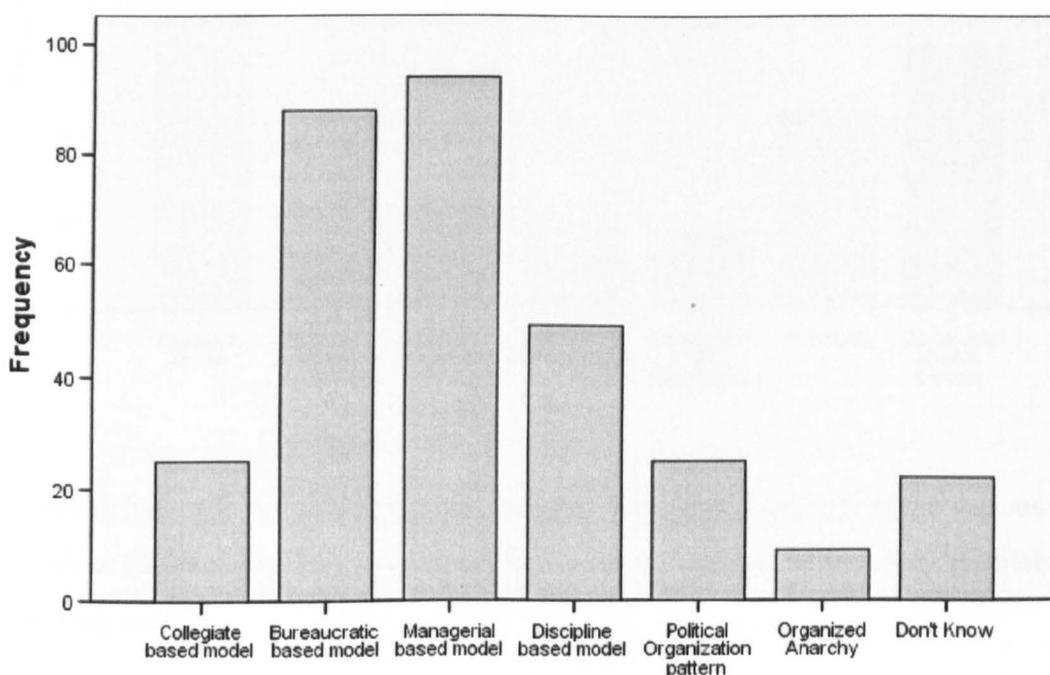
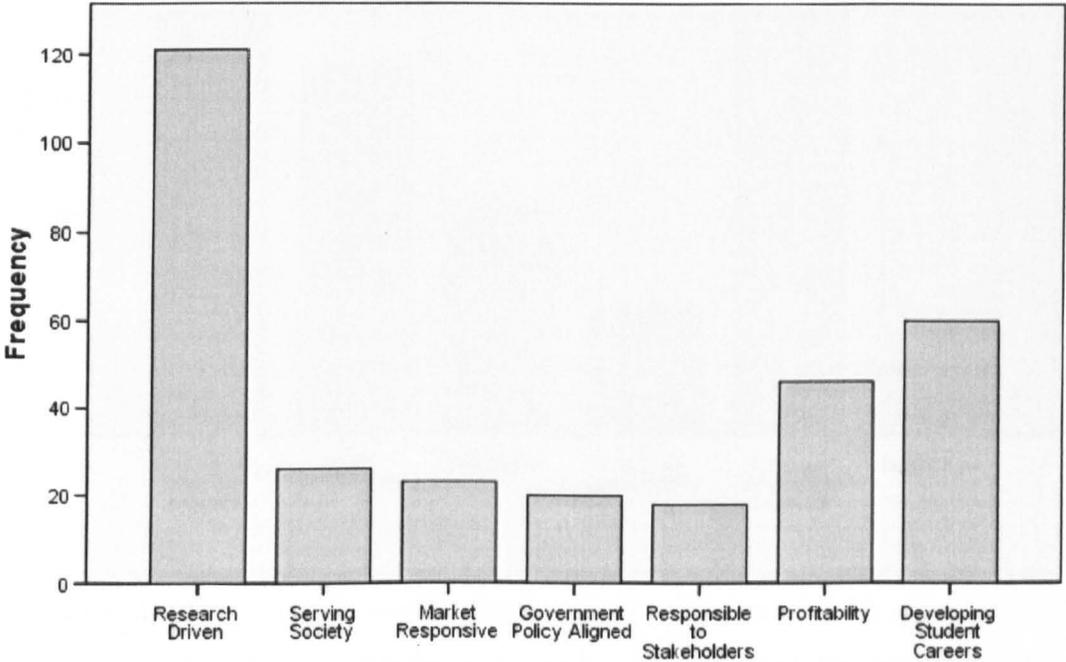


Figure 5.5 above displays a high frequency of staff members finding that their institution is managerially based followed by the bureaucratic model. The collegial model of university structure is fourth in terms of frequency. An equal proportion of staff members did not know the current university model or structure. Whether this is due to a lack of available options or whether they genuinely did not know their university structure is something to consider and may be pertinent for further research.

Moreover another aim of the research study was to examine changes in university direction to identify if there were shifts in university focus away from traditional notions of their operations. Staff members were given 7 choices identified through the qualitative

phase to select what best described their university’s purpose. Figure 5.6 below details their responses.

Figure 5.6 Frequency responses on university purpose (n=314).

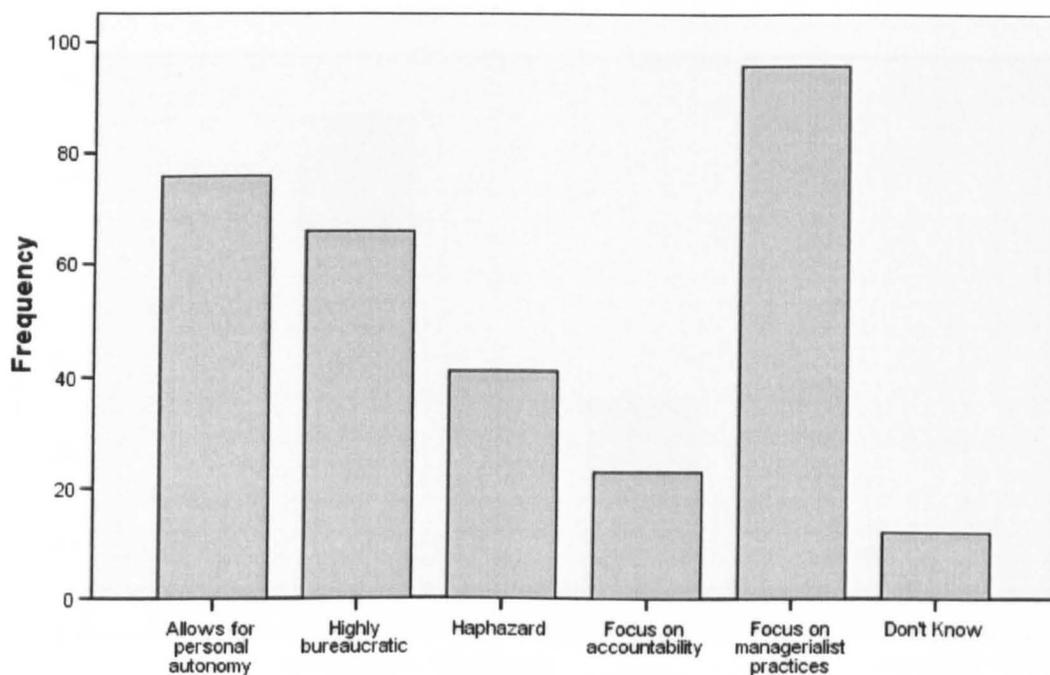


Research driven was the most frequent response from staff members at the various UK universities followed by ‘Developing student careers’. This is followed by profitability and serving society.

These results show that even with a HE environment geared towards more tangible goals of profitability and performance measurement, staff members still find that their respective universities are keen to promote research together with fostering students’ careers.

Interlinked with this issue is the need to further examine the current management style within their university. The perception of staff members on their university’s management style was vital in identifying if there were indeed overwhelmingly a single approach in university management (see figure 5.7 below).

Figure 5.7 Frequency responses on current management style (n=314).

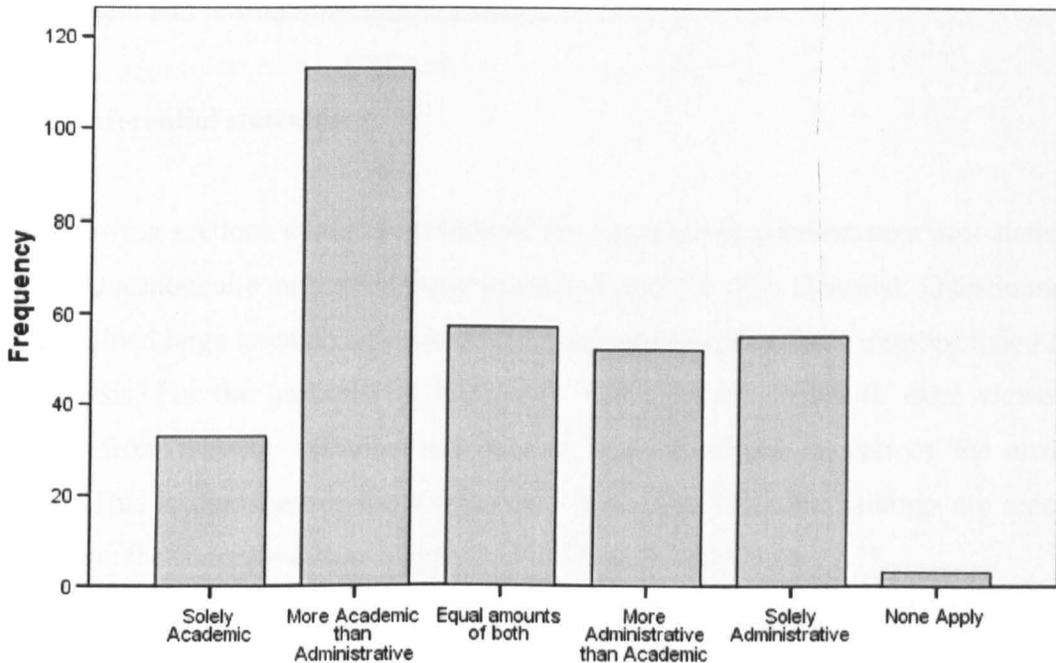


The results display a strong acceptance by staff members in UK universities that management within their institution is focused upon managerialist practices. This is reflective of the results in figure 5.5, where the managerial model takes prominence. While precedence is given to this, personal autonomy is second in the existing current management styles, followed by a highly bureaucratic approach, haphazard management style and finally one that focuses on accountability.

5.4b.2 Volume of academic/administrative work and prevalent management focus.

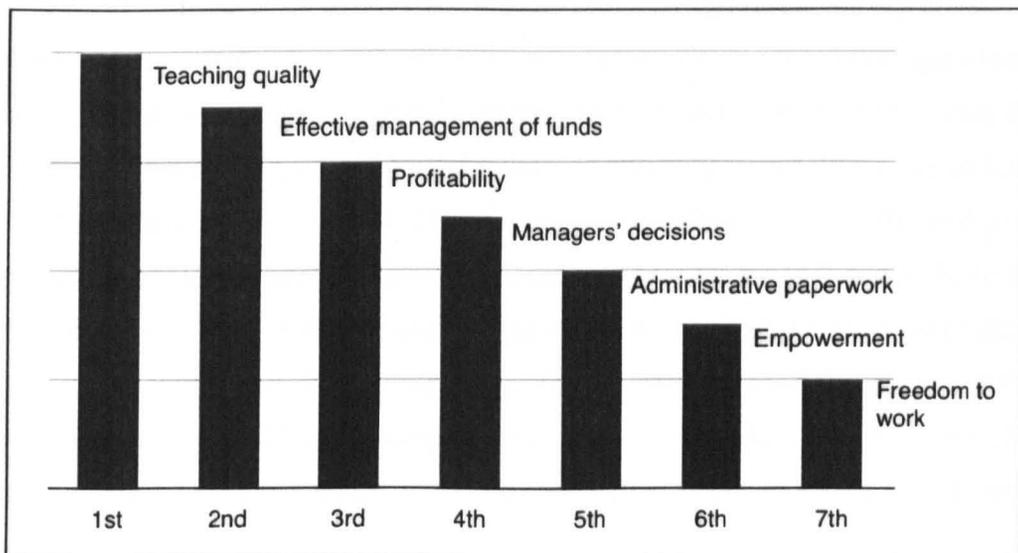
It was also important to identify the changes in the academic/administrative balance of university workload. 'More academic work over administrative' has the highest frequency which is then followed by almost equally frequencies of 'equal amounts of both', 'more administrative than academic' and 'solely administrative'. It is worthwhile highlighting that solely academic frequencies were the lowest (see figure 5.8 below).

Figure 5.8 Frequency responses on amount of academic/administrative work.



Respondents were asked to rank based on the degree of importance placed upon the following management practices at their respective universities. The question was aimed at identifying current management approaches based on perceptions of staff members (see figure 5.9).

Figure 5.9 Items ranked based on order of importance on Question 17



Results from figure 5.9 show that staff members ranked teaching quality as the most important practice in their university followed by effective management of funds and

profitability. Although teaching quality was ranked as most important in terms of management practices, more commercial and private sector philosophies of fund management and profitability follow closely.

5.4c Inferential statistics

The following sections detail the results of the quantitative questionnaire post statistical testing. Questionnaire responses were examined and the data cleansed. Questionnaires that contained large amounts of unanswered questions (missing data) were excluded from the analysis. For the purposes of this study 'don't know' responses were viewed as different from missing variables and instead were examined as part of the analysis process. This is discussed in more detail in 5.4c.4. The following findings are reported based upon the conceptual map highlighted in Chapter 1 (see figure 1.1).

5.4c.1 Reliability

In order to ensure that questionnaire results would be reliable, a Cronbach Alpha test of reliability was undertaken on both pilot testing data as well as actual questionnaire data. This was undertaken to examine if the questionnaire instrument pre actual administering was sufficiently reliable and if changes in design were required. All questions within the questionnaires were selected to measure the internal validity of the survey construct. A Cronbach Alpha score of 0.726 (N=66)⁴ was achieved on the pilot questionnaire displaying statistically reliable internal validity. Bryman and Cramer (1994) state that a score closer to 1 displays greater internal validity, advocating as a rule a score of 0.8 and above, while Easterby-Smith *et al.* (2002) agree a reliability score of 0.6 and over is acceptable. Sweet and Grace-Martin (2008) occupy a 'middle ground' and indicate that a score of above 0.7 on an index of four or more indicators highlight good reliability. As such the score of this research falls effectively between Bryman and Cramer's (1994) and Easterby-Smith *et al.*'s (2002) assumptions matching Sweet and Grace-Martin's (2009) assumptions for internal reliability. While the score is not in excess of 0.8, results are still statistically reliable.

⁴ Note: N here refers to the number of questions utilised in calculating the Cronbach Alpha score.

On collection and entering of questionnaire responses into SPSS a further Cronbach Alpha test was undertaken on actual data. This revealed a reliability score of 0.734 (N=66), indicating reliable data. Overall reliability of questionnaire data improved from pre to actual response collection by 0.05.

Table 5.7 Cronbach Alpha score⁵

Cronbach Alpha Score	(N=66)
Pilot	0.726
Actual	0.734
Scale Data	0.800 (N= 51)

A check for variances in Cronbach Alpha values if items were deleted from the scale was also undertaken (N=66). This revealed little variances, with a maximum change of 0.01 if items were removed from the scale. As this did not constitute a marked improvement in reliability scores, the scale of 66 items was proven to be reliable via Cronbach Alpha testing conditions.

Moreover as earlier sections have demonstrated, the spread of questionnaire responses are reflective of the current demographics and university types within the UK.

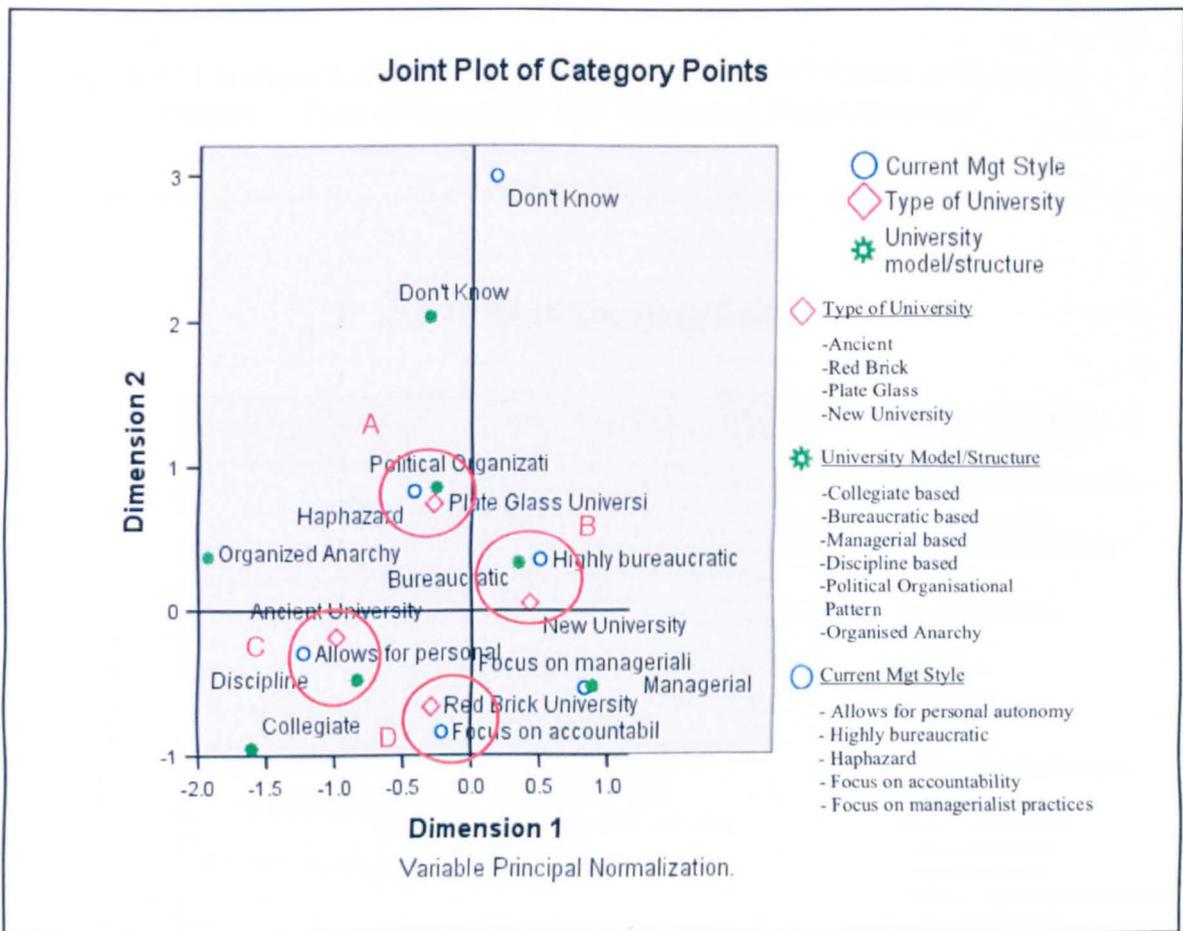
5.4c.2 HOMALS results

A multiple correspondence analysis test (HOMALS) was undertaken on nominal data gathered from questionnaires. A HOMALS test identifies links or relationships between nominal data providing a graphical representation through plotting related objects closer to each other (Malhotra and Birks, 2006). Undertaken on nominal or categorical data it provides a means to visually identify closeness of relationships through graphical representation enabling analysis of these relationships through review of quadrants or sections. A HOMALS test was undertaken on nominal values of ‘current management style’, ‘type of university’ and ‘university model/structure’ to identify visually any existing associations. This would highlight any particular associations of current management style or university model to a particular type of university. It is important to

⁵ Note: N denotes number of questions utilised. N=66 utilised all questions within the questionnaire, where N=51 utilised solely interval questions.

note that the dimensions, for the purposes of this study, are not considered or examined. The importance of this test was to examine associations and closeness between different nominal variables and not their mathematical positions in three-dimensional space (as a HOMALS undertakes). Rather the quadrants provide a means to identify closeness or 'clusters' with coordinates and plots constructed automatically to facilitate zoning. The test required a minimum of 3 nominal variables to be included in order to plot potential associations (Abdi and Valentin, 2007)

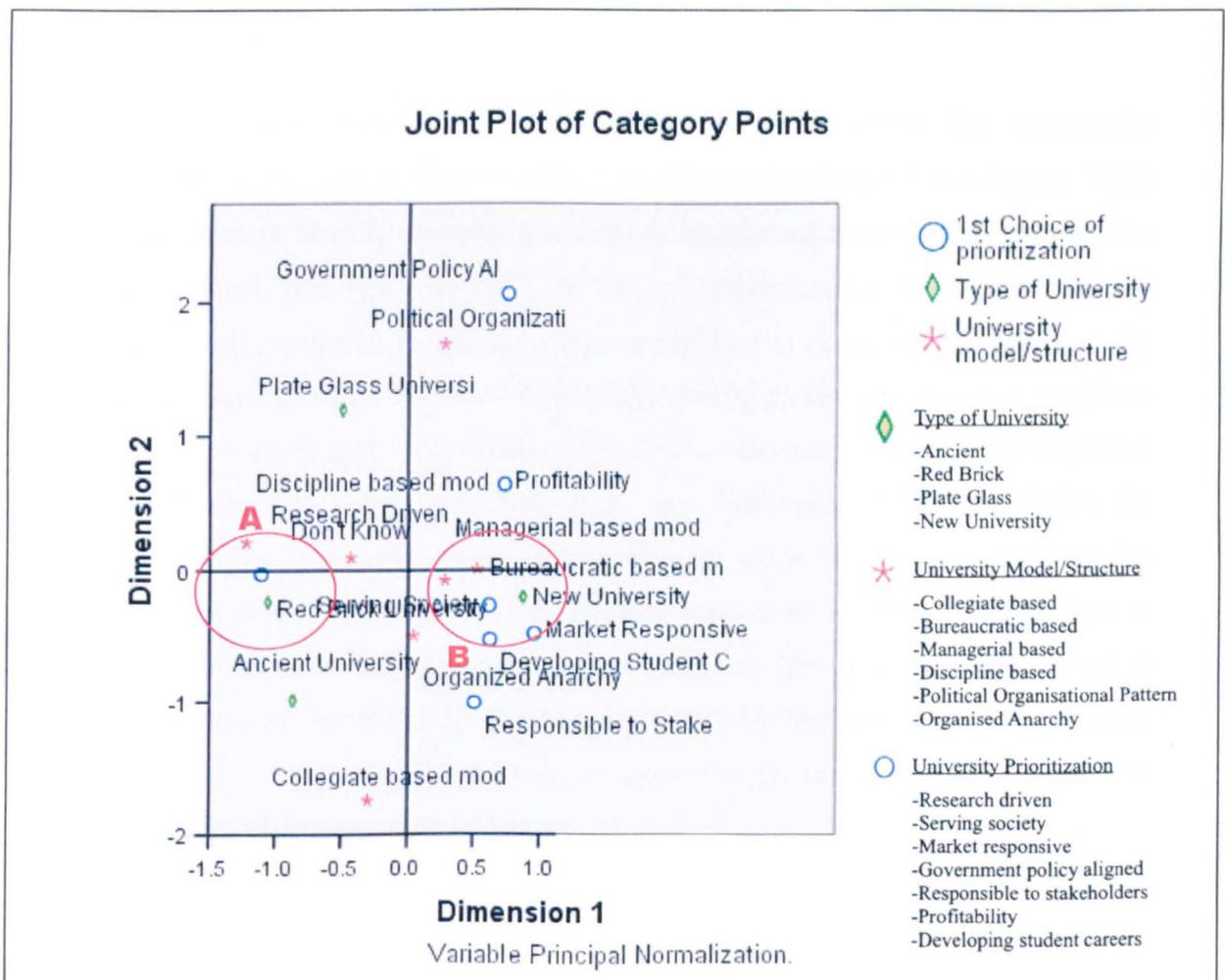
Figure 5.10 Multiple Correspondence Analysis between 'Current Management Style', 'Type of University' and 'University Model/Structure'



From Figure 5.10, it can be seen that plate glass universities correspond closely to the political organisational pattern (Circle A) where new universities correspond closely to the bureaucratic model with its management style being highly bureaucratic (Circle B). The discipline based model and management that allows for personal autonomy is closely linked to ancient university structures (Circle C). Red brick universities on the other hand correspond closely to having a management style that is focused on accountability (Circle D).

It is also clear from HOMALS findings that ancient universities were more focused on being research and teaching centred with a discipline based model of management. While this differs from the conventional collegial management approach associated with ancient universities there is still considerable amount of personal autonomy for staff members. As such, ancient universities, while not necessarily collegial in management model, concentrate on excellence in research and teaching delivery simultaneously empowering its staff members with freedoms and autonomy in decision-making. Red brick universities, while not clearly linked to a particular management model, are closely linked to a strong focus on accountability.

Figure 5.11 Multiple Correspondence Analysis between '1st Choice of University Purpose', 'Type of University' and 'University Model/Structure'



It was also worthwhile identifying any potential linkages of university prioritisation and university model with once again university type.

From Figure 5.11 it can be seen that results from red brick universities correspond closely to being research driven (Circle A), where new universities' responses correspond to bureaucratically and managerially based models (Circle B). Responses at new universities also correspond closely to being market responsive as well as serving society (Circle B). New universities were also keen on developing student careers.

It is important to note that the results provide a graphical presentation of closeness and association of variables. It does not statistically provide p values or correlation of strength. As variables are essentially categorical and intrinsically non-mathematical results provide a means to subjectively identify associations based upon the quadrants in three-dimensional space (Abdi and Valentin, 2007).

5.4c.3 Bivariate tests

Bivariate tests were undertaken on rank data questions within the quantitative questionnaire survey, which examined the importance placed on various issues. These were undertaken to identify potential correlations of selected issues within ordinal data types. As ordinal data types required the use of non-parametric tests of correlation, Spearman's rank correlation technique or rho was utilised in examining the directionality and strength between tested variables. While there was an opportunity to utilise ANOVAs in analysing ranked data, Stevens (1946: p679; 1951), who many regard as the originator of the different data types (see Vellerman and Wilkinson, 1993), highlights the incompatibility of parametric tests undertaken as usage of these scales implies "knowledge of something more than the relative rank-order of data." Indeed there is growing usage of such scales by education researchers (see *ibid*), yet Stevens (*ibid*) contends the "illegal statisticizing" requires some form of "pragmatic sanction" in order for its application of parametric analysis. As such the research has taken a conscious decision aligned with conventional wisdom.

Table 5.8 Bivariate results on Question 14.

Ranked Importance placed upon	Efficiency	Effectiveness	Economy
Efficiency	1		
Effectiveness	-0.344*	1	
Economy	-0.523*	-0.605*	1

*Correlation is significant at the 0.01 level (2-tailed). (N=263)

#Values in cells are coefficient *r*

Spearman's rank correlation was undertaken on Q14 to examine the existence of relationships and strengths between the 3Es as identified within the body of literature. Results display statistically significant values for all three issues of efficiency, effectiveness and economy. Table 5.8 identifies negative relationships with all three variables. When importance was placed upon economy there were strongly negative relationships with efficiency (-0.523) and effectiveness (-0.605). Similarly when importance was placed upon efficiency there was a strong negative relationship with economy (-0.523), and a slightly less strong relationship with effectiveness (-0.344).

While it would have been worthwhile utilising a larger range of variables given the ideology of the 3Es it would be unrealistic to combine the consideration of efficiency, effectiveness and economy with other identified variables, which are not linked to its examination. Moreover it is important to note that even with a small number of variables tested (in this case 3) both positive and negative correlations can occur, for example efficiency having equal and positive correlation as most important across all responses. Likewise efficiency could be negatively correlated as least important in all responses. MEI (2010) defines these results as monotonic in nature and therefore can either decrease or increase together or in opposite directions. As such the results in table 5.8 are viable.

Table 5.9 Bivariate results on Question 17.

Ranked Importance placed upon	Administrative Paperwork	Teaching Quality	Profitability	Effective Mgt of Funds	Empowerment	Freedom to Decide	Manager's Decisions
Administrative Paperwork	1						
Teaching Quality	-0.280**	1					
Profitability	0.048	-0.288**	1				
Effective Mgt of Funds	-0.145*	-0.113	0.187**	1			
Empowerment	-0.406**	0.064	-0.402**	-0.262**	1		
Freedom to Decide	-0.321**	0.0882	-0.479**	-0.315**	0.356**	1	
Manager's Decisions	0.139*	-0.372**	0.004	-0.052	-0.405**	-0.343**	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed). (N=233)

#Values in cells are coefficient *r*

Q17 aimed to examine the rank correlation between different variables related to the management practices within respondent's universities. Spearman's rank correlation tests highlighted relationships that were reflective of issues highlighted within the literature (see table 5.9).

In terms of administrative paperwork, the findings reveal a positive directional relationship with manager's decisions (0.139). As such importance placed upon administrative paperwork had a positive effect on importance placed upon manager's decisions and vice-versa. Similar positive relationships exist between profitability and effective management of funds (0.187). It is worthwhile noting that increased importance placed upon empowerment results in increased freedom to decide (0.356) within university management approaches.

Negative relationships were also documented in Table 5.9, with the strongest being between profitability and freedom to decide (-0.479). This indicates strongly that importance placed upon profitability results in less placed upon freedom to decide. Similarly profitability had negative relationships with empowerment (-0.402). In addition to this, negative relationships further exist between effective management of funds and empowerment (-0.262) and freedom to decide (-0.315), emphasising that high importance placed upon effective management of funds led to reductions in prominence of empowerment and freedom to decide.

Oddly, the results further indicate a negative relationship between administrative paperwork and effectiveness management of funds (-0.145) revealing perhaps that importance placed upon bureaucratic measures did not constitute effective fund management.

Table 5.10 Bivariate results on Question 18.

Ranked Importance placed upon	Research Recognition	Quality of Education	Widening Participation	Increasing Student Numbers	Matching Performance Criteria	Financial Considerations	Staff Efficiency
Research Recognition	1						
Quality of Education	0.200**	1					
Widening Participation	-0.385**	0.089	1				
Increasing Student Numbers	-0.367**	-0.309**	0.098	1			
Matching Performance Criteria	-0.255**	-0.346**	-0.210**	-0.099	1		
Financial Considerations	-0.201**	-0.495**	-0.363**	-0.002	0.054	1	
Staff Efficiency	-0.245**	-0.224**	-0.173**	-0.327**	0.092	0.108	1

**Correlation is significant at the 0.01 level (2-tailed). (N=240)

#Values in cells are coefficient *r*

Spearman's rank correlation was further undertaken on the importance placed upon university management direction or focus (Q18). This was undertaken to examine the directional relationships of these issues and how a particular organisational focus would or could affect the other (see table 5.10).

The results indicate negative directional relationships between all statistically significant variables with the exception of research recognition and quality of education. This indicates that when strong importance was placed on research recognition within the university this resulted in strong importance placed upon ensuring the quality of education. While this relationship is not very strong (0.200) the results indicate a positive association with both variables, therefore suggesting that increased importance in one results in increased prominence of the other.

Another correlation worthwhile noting lies with the relationships of quality of education against increasing student numbers (-0.309), matching performance criteria (-0.346), financial considerations (0.495) and staff efficiency (-0.224). The negative relationships identified highlight importance placed upon any of these approaches would have a negative impact on the quality of education.

Table 5.11 Bivariate results on Question 19.

Ranked Importance placed upon	QAA	RAE	HEFC	Top-up fees	Widening Participation	Reductions in funding	Student numbers
QAA	1						
RAE	0.115	1					
HEFC	0.006	0.157*	1				
Top-up fees	-0.411**	-0.193**	-0.200**	1			
Widening Participation	-0.1	-0.359**	-0.240**	-0.172**	1		
Reductions in funding	-0.411**	-0.313**	-0.253**	0.150*	-0.165**	1	
Student numbers	-0.098	-0.475**	-0.305**	-0.190**	0.127*	-0.066	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

#Values in cells are coefficient r

Q19 dealt with issues related to funding and government agencies within HE and sought to identify potential relationships and their respective strengths against different mechanisms of funding within the political and external context of universities (see table 5.11).

Positive relationships were identified between RAE and HEFC (0.157), and widening participation against student numbers (0.127). This indicated that importance placed upon RAE linked funding resulted in increased importance placed upon the funding councils, where similarly increased importance on widening participation resulted in increased need and importance for student numbers. There was further a positive relationship between top-up fees and reductions in funding, which signified that more importance placed upon top-up fees resulted in increased importance placed upon reductions in funding (0.150).

The strongest negative relationship came between RAE and student numbers (-0.475) indicating that importance placed on RAE resulted in less importance on student numbers. Strong negative relationships were also recorded for QAA against top-up fees (-0.411) and reductions in funding (-0.411) suggesting that importance placed upon the QAA within universities would result in less placed upon top-up fees and less focus on reductions in funding. It is also worthwhile noting the negative relationship between top-up fees against widening participation (-0.172) and student numbers (-0.190), which highlight that prominence placed upon top-up fees, would result in a weakening of focus upon widening participation and student numbers.

Table 5.12 Bivariate results on Question 20.

Ranked Funding Importance based on:	HEFC	Research Grants	Postgraduate fees	Full-time UK students	Part-time HE students	International fees	Other incomes
HEFC	1						
Research Grants	0.0681	1					
Postgraduate fees	-0.213**	-0.158*	1				
Full-time UK students	-0.182**	-0.294**	-0.015	1			
Part-time HE students	-0.320**	-0.508**	0.067	0.018	1		
International fees	-0.183**	-0.136*	-0.188**	-0.147*	0.04	1	
Other incomes	-0.167**	-0.04	-0.172**	-0.324**	-0.229**	-0.166**	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

#Values in cells are coefficient r

Spearman's rank correlation was further undertaken to identify more specifically the effects and importance placed on different major streams of funding within HEIs (Q20). This was aimed at examining the relationships that may exist between the different funding streams within universities (see table 5.12).

Negative relationships were recorded in all statistically significant variables. The variable HEFC had negative relationships with all other variables (except for research grants which was not statistically significant) indicating that importance of funding placed upon HEFC resulted in weakening importance placed upon other funding streams. The strongest negative relationship exists between research grants and part-time students (-0.508) demonstrating that importance of funding from research grants prompts a strong reduction of importance on part-time student monies.

Moreover negative relationships between international fees and HEFC (-0.183), research grants (-0.136), postgraduate fees (-0.188) and full-time UK students (-0.147), highlight strong importance placed upon international students led to weakening importance placed on more national and local funding streams.

5.4c.4 ANOVA

Within the questionnaire, respondents were also asked to rate from 1 to 5 (1 being Strongly Disagree and 5 being Strongly Agree) their agreement with a range of statements. A one-way analysis of variance test (ANOVA) was undertaken on the different nominal (categorical) data to identify differences in means responses to all Likert statements (interval data) (Field, 2003).

In order to ensure that ANOVA test results are accurate Field (2003) and Toothaker (1993) recommend that equal variances exist within analysed data. This is to ensure an accurately reflective F-ratio score alongside utilisation of appropriate *post hoc* tests. Homogeneity of variance tests were undertaken on ANOVA data to ascertain if variances were to be assumed equal or unequal. A null hypothesis of equal variance assumption was tested against ANOVA values. A significant value of >0.05 accepts this assumption where scores below would reject the hypothesis and indicate that variances are unequal, requiring reporting of F-ratios under Brown-Forsythe assumptions.

Tukey *post hoc* tests were undertaken on statistically significant ANOVA variables identified to contain equal variances. Moreover as the survey returned 314 responses, the

testing of large numbers of means is consistent with Field's (2005) assumptions (see chapter 4.6b).

All significant ANOVA results with equal variances are reported in the following sections. Significant results with unequal variances can be found in Appendix 5. While it has been the traditional method to remove 'don't know' responses, this study has consciously included this in the analysis process. Utilisation of this response is for two reasons. It was important to examine if staff members were aware of their organisational structure. A response of 'don't know' was equally as important as selection of a particular option and was viewed as an actual response. Secondly, missing responses were coded differently from 'don't know' responses as part of the data collection design.

5.4c.4.1 ANOVA against university models.

ANOVA tests were undertaken on interval data against the nominal variable of university models (highlighted in figure 1.1). This was undertaken to identify if there were significant differences in mean scores of the following statements as a product of different university models. Therefore the following hypothesis was utilised in testing for differences in mean ratings based upon university models.

H₀ – There is no difference in means between the different university models

H₁ – There is a difference in means between the different university models

Homogeneity tests revealed a number of ANOVA results with equal and unequal variances. The following significant ANOVA results were found to have equal variances (see table 5.13 below).

Table 5.13 Tests of homogeneity of variance results on ANOVAs against university models.

	Levene Statistic	df1	df2	Sig.
Pressure to improve student numbers	1.844	6	305	.090
Increased focus on profitability in HE	.648	6	305	.692
Top-up fees	2.079	6	294	.056
Funding Councils' policies	1.682	6	295	.125
Commercialisation	1.815	6	295	.096
Govt funding policies based on student numbers	1.632	6	295	.138
Academic decisions made by managers	.973	6	289	.443
Cost effectiveness is paramount in my department	.818	6	290	.556
Increased focus on managing	2.019	6	290	.063

Table 5.14 below indicates ANOVA results where equal variances are assumed with acceptance of the alternate hypothesis (H_1).

Table 5.14 Significant ANOVA results on statements against university models

		df	F	Sig.	Hypothesis Accepted
Pressure to improve student numbers	Between Groups	6	2.961	.008	$H_1 (1)$
	Within Groups	305			
Increased focus on profitability in HE	Between Groups	6	5.432	.000	$H_1 (2)$
	Within Groups	305			
Top-up fees	Between Groups	6	2.918	.009	$H_1 (3)$
	Within Groups	294			
Funding Councils' policies	Between Groups	6	3.326	.003	$H_1 (4)$
	Within Groups	295			
Commercialisation	Between Groups	6	4.661	.000	$H_1 (5)$
	Within Groups	295			
Govt funding policies based on student numbers	Between Groups	6	2.404	.028	$H_1 (6)$
	Within Groups	295			
Academic decisions made by managers	Between Groups	6	5.557	.000	$H_1 (7)$
	Within Groups	289			
Cost effectiveness is paramount in my department	Between Groups	6	4.403	.000	$H_1 (8)$
	Within Groups	290			
Increased focus on managing	Between Groups	6	6.192	.000	$H_1 (9)$
	Within Groups	290			

A 'post hoc' Tukey multiple range test (Malhotra and Birks, 2006) was undertaken on these statements to identify possible splits in the mean response scores of the different university models.

Table 5.15 Tukey results on statement 'Pressure to improve student numbers'

University model/structure	N	Subset for alpha = .05	
		1	2
Collegiate based model	25	3.9600	
Organized Anarchy	9	4.0000	4.0000
Discipline based model	49	4.2041	4.2041
Don't Know	22	4.2273	4.2273
Managerial based model	94	4.4362	4.4362
Bureaucratic based model	88	4.5227	4.5227
Political Organization pattern	25		4.6400
Sig.		.172	.076

In terms of pressure to improve student numbers table 5.15 indicates a difference in means between groups belonging to collegiate based models as compared to those in the political organisation pattern. The collegiate based model had a score of 3.9 being closer to agree where the political organisation structure had a score closer to strongly agree of 4.64.

Table 5.16 Tukey results on statement 'Increased focus on profitability in HE'

University model/structure	N	Subset for alpha = .05	
		1	2
Collegiate based model	25	3.8800	
Discipline based model	49	4.0204	4.0204
Political Organization pattern	25	4.1200	4.1200
Organized Anarchy	9	4.3333	4.3333
Don't Know	22	4.3636	4.3636
Managerial based model	94	4.4574	4.4574
Bureaucratic based model	88		4.5227
Sig.		.053	.140

Under the Tukey *post hoc* test, the collegiate model differs from scores of the bureaucratic model (see table 5.16 above). A score of 3.88 indicates that staff members working within collegially based models were close to agreeing with this statement,

where those in bureaucratic structures had a score of 4.52, between agree and strongly agree.

Table 5.17 Tukey results on the issue of ‘Top-up fees’

University model/structure	N	Subset for alpha = .05
		1
Bureaucratic based model	85	2.6824
Managerial based model	92	2.9348
Political Organization pattern	25	3.0000
Don't Know	19	3.1053
Discipline based model	46	3.1522
Organized Anarchy	9	3.6667
Collegiate based model	25	3.6800
Sig.		.067

While ANOVA results indicate a statistical difference in scores between the groups, the Tukey *post hoc* test was unable to provide a clear identification of where these differences exist (see table 5.17 above).

Table 5.18 Tukey results on the issue of ‘Funding Councils’ policies’

University model/structure	N	Subset for alpha = .05	
		1	2
Managerial based model	93	2.9785	
Bureaucratic based model	85	3.0000	3.0000
Political Organization pattern	25	3.1600	3.1600
Collegiate based model	25	3.3200	3.3200
Discipline based model	46	3.4783	3.4783
Organized Anarchy	9	3.8889	3.8889
Don't Know	19		4.0000
Sig.		.112	.057

Managerially based university staff members scored 2.97, just off neutral to the effects of policies of the funding councils. In contrast staff members who didn’t know what their university model was highlighted a positive effect these funding policies had with a score of 4 (see table 5.18 above).

Table 5.19 Tukey results on issue of 'Commercialisation'

University model/structure	N	Subset for alpha = .05	
		1	2
Bureaucratic based model	85	2.2353	
Managerial based model	93	2.4194	2.4194
Discipline based model	46	2.7391	2.7391
Political Organization pattern	25	2.9600	2.9600
Organized Anarchy	9	3.1111	3.1111
Don't Know	19	3.2105	3.2105
Collegiate based model	25		3.2400
Sig.		.059	.182

Table 5.19 highlights staff members who found their universities to exhibit a bureaucratic management structure found commercialisation of HE to be between detrimental and neutral with a score of 2.24. Interestingly staff members at collegially based models were between neutral and positive to the effects that commercialisation had on higher education with a score of 3.24.

Table 5.20 Tukey results on statement 'Government funding policies based on student numbers'

University model/structure	N	Subset for alpha = .05
		1
Bureaucratic based model	85	2.5059
Managerial based model	93	2.5699
Collegiate based model	25	2.6400
Discipline based model	46	2.7826
Organized Anarchy	9	2.8889
Don't Know	19	3.0526
Political Organization pattern	25	3.4000
Sig.		.118

Under Tukey *post hoc* tests no particular group was identifiable as having a significant difference (see table 5.20 above).

Table 5.21 Tukey results on statement ‘Academic decisions made by managers’

University model/structure	N	Subset for alpha = .05	
		1	2
Collegiate based model	25	2.4800	
Organized Anarchy	9	2.6667	2.6667
Discipline based model	44	2.7955	2.7955
Political Organization pattern	23	3.0435	3.0435
Don't Know	19	3.4211	3.4211
Bureaucratic based model	86		3.5000
Managerial based model	90		3.5889
Sig.		.073	.085

For the statement academic decisions are made by managers there is a marked difference between the mean scores of collegiate based models in comparison to bureaucratic and managerial models. Staff members at collegial structures scored 2.48 between disagree and neutral where those within bureaucratic and managerial structures had mean scores of 3.50 and 3.59 respectively (see table 5.21 above). These were between neutral and agree.

Table 5.22 Tukey results on statement ‘Cost effectiveness is paramount in my department’

University model/structure	N	Subset for alpha = .05
		1
Discipline based model	44	3.0909
Collegiate based model	25	3.1200
Political Organization pattern	24	3.5000
Bureaucratic based model	86	3.6628
Organized Anarchy	9	3.6667
Don't Know	19	3.7368
Managerial based model	90	3.9222
Sig.		.074

Not discernable differences under Tukey were observed for this statement (see table 5.22).

Table 5.23 Tukey results on statement 'Increased focus on managing'

University model/structure	N	Subset for alpha = .05		
		1	2	3
Collegiate based model	25	2.8800		
Organized Anarchy	9	3.2222	3.2222	
Political Organization pattern	24	3.5417	3.5417	3.5417
Don't Know	19	3.6316	3.6316	3.6316
Discipline based model	44	3.6818	3.6818	3.6818
Bureaucratic based model	86		3.8023	3.8023
Managerial based model	90			4.0778
Sig.		.051	.332	.431

Tukey *post hoc* results indicate a difference in the mean scores of groups within the collegiate based model and those in the managerial based model (see table 5.23). Staff at the collegially based universities had a score of between disagree and neutral of 2.88 to the statement there is increased focus on managing. In contrast to this, staff members as managerially focused institutions had a score of 4.07 agreeing with this statement.

5.4c.4.2 ANOVA against staff position

ANOVA tests were also undertaken based on the nominal variable of staff positions (highlighted in figure 1.1). This was undertaken to examine and identify any potential differences in perceptions of the statements within the questionnaire. The following hypothesis was tested:

H₀ – There is no difference in means between the different staff positions

H₁ – There is a difference in means between the different staff positions

Detailed below are the results of statistically significant ANOVAs with equal variance assumptions.

A homogeneity of variance test was undertaken to identify which significant ANOVA result had equal variances. The following significant ANOVA results were found to have equal variances (see table 5.24 below).

Table 5.24 Tests of homogeneity of variance results on ANOVAs against staff position.

	Levene Statistic	df1	df2	Sig.
Pressure to improve student numbers	1.625	5	308	.153
Top-up fees increasing competition	1.963	5	307	.084
Top-up fees causing increased commercial focus	1.071	5	308	.377
Increased focus on profitability in HE	1.708	5	308	.132
Corporate Mgt ensure University survival	.876	5	307	.497
Universities moving away from collegial structure	1.095	5	308	.363
RAE	1.182	5	298	.318
Commercialisation	.719	5	298	.609
Proactive to environmental forces	.877	5	291	.497

The following ANOVA results have equal variances assumed where the alternate hypothesis (H_1) is accepted (see table 5.25 below).

Table 5.25 Significant ANOVA results on statements against staff position

		df	F	Sig.	Hypothesis Accepted
Pressure to improve student numbers	Between Groups	5	7.531	.000	H ₁ (1)
	Within Groups	308			
Top-up fees increasing competition	Between Groups	5	2.307	.044	H ₁ (2)
	Within Groups	307			
Top-up fees causing increased commercial focus	Between Groups	5	3.006	.011	H ₁ (3)
	Within Groups	308			
Increased focus on profitability in HE	Between Groups	5	4.887	.000	H ₁ (4)
	Within Groups	308			
Corporate Mgt ensures University survival	Between Groups	5	4.604	.000	H ₁ (5)
	Within Groups	307			
Universities moving away from collegial structure	Between Groups	5	3.066	.010	H ₁ (6)
	Within Groups	308			
RAE	Between Groups	5	7.121	.000	H ₁ (7)
	Within Groups	298			
Commercialisation	Between Groups	5	5.329	.000	H ₁ (8)
	Within Groups	298			
Proactive to environmental forces	Between Groups	5	2.566	.027	H ₁ (9)
	Within Groups	291			

As equal variances are assumed a Tukey *post hoc* test was subsequently undertaken to identify where the differences in mean scores lie.

Table 5.26 Tukey results on statement 'Pressure to improve student numbers'

Position at University	N	Subset for alpha = .05	
		1	2
University Senior Mgt	4	3.7500	
Faculty Senior Mgt	43	3.9767	3.9767
Professor/Reader	50	4.0600	4.0600
Administrative Mgt	37	4.2162	4.2162
Administrative Staff	36		4.5556
Lecturers/SL/PL	144		4.6042
Sig.		.510	.184

Tukey results from table 5.26 display that university senior management are between neutral and agree to the statement on pressure to improve student numbers, scoring a mean of 3.75. This was found to be significantly different from mean scores of lecturers with a value between agree and strongly agree of 4.60

Table 5.27 Tukey results on statement ‘Top-up fees increasing competition’

Position at University	N	Subset for alpha = .05
		1
Professor/Reader	49	3.5102
Faculty Senior Mgt	43	3.7907
Administrative Mgt	37	3.8649
Lecturers/SL/PL	144	3.8889
University Senior Mgt	4	4.0000
Administrative Staff	36	4.3611
Sig.		.270

In terms of the statement top-up fees increasing competition, while ANOVA results indicate a difference in the means, Tukey *post hoc* tests were unable to reveal a clear distinction (see table 5.27 above).

Table 5.28 Tukey results on statement ‘Top-up fees causing increased commercial focus’

Position at University	N	Subset for alpha = .05
		1
Professor/Reader	50	3.5600
Faculty Senior Mgt	43	3.7907
Administrative Mgt	37	3.8108
University Senior Mgt	4	4.0000
Lecturers/SL/PL	144	4.0764
Administrative Staff	36	4.3889
Sig.		.258

Similarly no discernable difference was indicated in table 5.28 by Tukey *post hoc* testing.

Table 5.29 Tukey results on statement ‘Increased focus on profitability in HE’

Position at University	N	Subset for alpha = .05	
		1	2
University Senior Mgt	4	3.5000	
Faculty Senior Mgt	43	4.0465	4.0465
Administrative Mgt	37	4.1351	4.1351
Professor/Reader	50		4.2600
Lecturers/SL/PL	144		4.4236
Administrative Staff	36		4.6111
Sig.		.091	.179

For the statement, ‘there is increased focus on profitability in HE’ the differences in group mean scores were between those at university senior management level and those at professor/reader, lecturer and administrative staff positions. While university senior management had mean scores between neutral and agree of 3.50, staff members in the professor/reader, lecturer and administration staff groups differ statistically with scores between agree and strongly agree (see table 5.29 above).

Table 5.30 Tukey results on statement ‘Corporate Management ensures university survival’

Position at University	N	Subset for alpha = .05
		1
Professor/Reader	50	2.6800
Lecturers/SL/PL	144	3.0417
Faculty Senior Mgt	43	3.2558
University Senior Mgt	4	3.7500
Administrative Mgt	37	3.7838
Administrative Staff	35	3.8571
Sig.		.155

There was no discernable difference in mean scores under Tukey *post hoc* testing for this statement (see table 5.30 above).

Table 5.31 Tukey results on statement ‘Universities moving away from collegial structure’

Position at University	N	Subset for alpha = .05
		1
University Senior Mgt	4	3.5000
Faculty Senior Mgt	43	3.7209
Administrative Mgt	37	3.8378
Professor/Reader	50	4.1400
Administrative Staff	36	4.2500
Lecturers/SL/PL	144	4.2847
Sig.		.222

Likewise there was no clear difference in mean scores statistically under Tukey *post hoc* tests recorded in table 5.31.

Table 5.32 Tukey results on the issue of ‘Research Assessment Exercise’

Position at University	N	Subset for alpha = .05	
		1	2
Lecturers/SL/PL	139	2.6331	
Faculty Senior Mgt	42	2.9048	2.9048
Professor/Reader	50	3.0000	3.0000
Administrative Mgt	37	3.2703	3.2703
Administrative Staff	32		3.9063
University Senior Mgt	4		4.0000
Sig.		.646	.094

ANOVA results indicate a difference in mean scores, where subsequently Tukey tests (displayed in table 5.32) reveal this difference to lie between staff members at lecturer positions to those at university senior management level and administrative staff. Lecturers found that the RAE was between neutral and detrimental to their university with a mean of 2.63, where university senior management and administrative staff rated closer to a positive effect with a score of 4.00 and 3.90 respectively.

Table 5.33 Tukey results on the issue of 'Commercialisation'

Position at University	N	Subset for alpha = .05
		I
Professor/Reader	50	2.2400
Lecturers/SL/PL	139	2.3885
Faculty Senior Mgt	42	2.8571
Administrative Staff	32	3.0000
Administrative Mgt	37	3.2162
University Senior Mgt	4	3.2500
Sig.		.128

From table 5.33, while ANOVA tests indicate a difference in mean scores, Tukey *post hoc* tests were unable to reveal where these differences lie between the groups.

Table 5.34 Tukey results on statement 'Proactive to environmental forces'

Position at University	N	Subset for alpha = .05
		I
Professor/Reader	49	2.9184
Lecturers/SL/PL	135	2.9704
Administrative Mgt	37	3.1892
Faculty Senior Mgt	41	3.3902
University Senior Mgt	4	3.5000
Administrative Staff	31	3.6774
Sig.		.450

Similarly there were no discernable results in terms of levels of agreement for this statement under Tukey tests (see table 5.34 above).

5.4c.4.3 ANOVA results on university type

ANOVA tests were further undertaken based on university type (highlighted in figure 1.1). This was to identify if differences in mean scores existed within the different university groups on statements within the questionnaire. The following hypothesis was tested:

- Ho – There is no difference in means between the different university groups
- H₁ – There is a difference in means between the different university groups

A Homogeneity of Variance test was similarly undertaken to examine variance assumptions. Table 5.35 below displays ANOVA results, which were assumed to have equal variances.

Table 5.35 Tests of homogeneity of variance results on ANOVAs against university type.

	Levene Statistic	df1	df2	Sig.
Pressure to improve student numbers	1.901	3	310	.129
Top-up fees causing increased commercial focus	2.303	3	310	.077
University education seen as a product	.579	3	310	.630
Academic decisions made by managers	.471	3	294	.703
Cost effectiveness is paramount in my dept	1.185	3	295	.316
Considerable amount of management autonomy	2.408	3	295	.067

Significant ANOVA results where the alternate hypothesis (H_1) was accepted are detailed in table 5.36 below.

Table 5.36 Significant ANOVA results on statements against university type.

		df	F	Sig.	Hypothesis Accepted
Pressure to improve student numbers	Between Groups	3	13.160	.000	$H_1 (1)$
	Within Groups	310			
Top-up fees causing increased commercial focus	Between Groups	3	4.884	.002	$H_1 (2)$
	Within Groups	310			
University education seen as a product	Between Groups	3	5.245	.002	$H_1 (3)$
	Within Groups	310			
Academic decisions made by managers	Between Groups	3	4.489	.004	$H_1 (4)$
	Within Groups	294			
Cost effectiveness is paramount in my dept	Between Groups	3	7.008	.000	$H_1 (5)$
	Within Groups	295			
Considerable amount of management autonomy	Between Groups	3	3.310	.021	$H_1 (6)$
	Within Groups	295			

Table 5.37 Tukey results on statement 'Pressure to improve student numbers'

Type of University	N	Subset for alpha = .05	
		1	2
Ancient University	27	3.9259	
Red Brick University	74	3.9865	
Plate Glass University	62		4.5323
New University	151		4.5695
Sig.		.977	.994

Differences in mean scores were observed for ancient and red brick universities in contrast to plate glass and new universities. Tukey *post hoc* analysis revealed that ancient and red brick universities had mean scores close to agree of 3.93 and 3.99 respectively which differ statistically from plate glass and new universities which had scores between agree and strongly agree of 4.53 and 4.57 respectively (see table 5.37 above).

Table 5.38 Tukey results on statement 'Top-up fees causing increased commercial focus'

Type of University	N	Subset for alpha = .05	
		1	2
Ancient University	27	3.4815	
Red Brick University	74	3.7838	3.7838
Plate Glass University	62	3.8065	3.8065
New University	151		4.1921
Sig.		.422	.222

In terms of the statement top-up fees causing increased commercial focus, table 5.38 indicates that mean scores of staff members at ancient universities differed significantly from those at new universities. Ancient universities had a mean score of 3.48 between neutral and agree. New universities on the other hand, had a score of 4.19 between agree and strongly agree to this statement.

Table 5.39 Tukey results on statement 'University education seen as a product'

Type of University	N	Subset for alpha = .05	
		1	2
Ancient University	27	3.7778	
Red Brick University	74	3.9865	3.9865
New University	151		4.2980
Plate Glass University	62		4.3226
Sig.		.541	.140

Ancient universities rated between neutral and agree with this statement with a mean score of 3.78. This mean score was statistically different from plate glass and new universities who rated between agree and strongly agree with a value of 4.32 on the statement that university education is seen as a product (see table 5.39 above).

Table 5.40 Tukey results on statement ‘Academic decisions made by managers’

Type of University	N	Subset for alpha = .05	
		1	2
Ancient University	26	2.7692	
Red Brick University	72	2.9861	2.9861
Plate Glass University	56	3.3214	3.3214
New University	144		3.4792
Sig.		.083	.147

For the statement academic decisions are made by managers, ANOVA results have identified statistical differences between the groups. Table 5.40 highlights that subsequent Tukey *post hoc* testing revealed the difference in mean scores to be between ancient and new universities. Ancient universities had a score between neutral and disagree with a value of 2.77. This differed from new universities who rated between neutral and agree with a mean value of 3.48.

Table 5.41 Tukey results on statement ‘Cost effectiveness is paramount in my department’

Type of University	N	Subset for alpha = .05	
		1	2
Ancient University	26	3.1154	
Red Brick University	73	3.2466	
New University	144		3.7778
Plate Glass University	56		3.8036
Sig.		.915	.999

Table 5.41 indicates differences in means to be between ancient and red brick universities, and new and plate glass universities. Ancient and red brick universities had mean scores between neutral and agree of 3.12 and 3.25 as compared to those at new and plate glass universities with mean values closer to agree of 3.78 and 3.80 respectively.

Table 5.42 Tukey results on statement ‘Considerable amount of management autonomy’

Type of University	N	Subset for alpha = .05	
		1	2
Red Brick University	73	3.1918	
Plate Glass University	56	3.5000	3.5000
New University	144	3.5139	3.5139
Ancient University	26		3.9615
Sig.		.452	.150

Staff members at red brick universities rated significantly different from those at ancient universities on this statement as identified by ANOVA results. The mean scores of red brick universities were between neutral and agree with a value of 3.19 where ancient universities rated closer to agree with a mean of 3.96 (see table 5.42 above).

5.4c.5 Factor analysis

For the purposes of this research, exploratory factor analysis was undertaken on scale question set 21 and 23 to examine any possible linkages or relationships between tested variables potentially identifying specific groupings, characteristics or archetypes.

Field (2003) states that before accurate factor analysis can be undertaken it is imperative to ensure a reliable scale. As such additional Cronbach Alpha tests of reliability was undertaken on scale data within Q21 and Q23. The reliability test revealed a statistically reliable Cronbach Alpha value of 0.773 for Q21 but unfortunately revealed a low score of 0.534 for Q23 (see table 5.43). The low Cronbach Alpha score revealed that results from Q23 would be less reliable. Based upon this first indicator of accuracy Q23 was excluded from factor analysis. Similar to assumptions undertaken with ANOVA tests and to ensure consistency, responses of ‘don’t know’ were included as a conscious choice. Responses under this category were viewed as equally valid to agree/disagree options. The percentage of ‘don’t know’ responses to all responses is 3.7%.

In addition to undertaking reliability analysis a Bartlett’s test of sphericity was conducted to examine the strength of the relationship between the selected variables. As the observed significance was <0.05 , relationships identified between tested variables were seen to exhibit a strong association (see table 5.43 for results).

It was also important to select an appropriate extraction and rotation method to best display accurately rotated factor matrices. It was decided that both commonly utilised principal component extraction methods would be selected alongside varimax rotations to maximise relationship between the variables and some of the factors (Kinnear and Gray, 2004). Varimax rotations are orthogonal and as such ensure independence between factors, unlike oblique rotations, which allow factors to correlate (Field, 2009). For the purpose of this study, varimax rotations were utilised they maintain “independence among mathematical factors” running rotational axes at right angles, further allowing rotations to arrive at a pattern of loadings that is easier to interpret (Kinnear and Gray: p411). Field (2009) highlights that varimax rotations allows for more interpretable clusters to be identified. Moreover he (*ibid*: 2009) recommends usage of orthogonal rotations unless there are clear theoretical grounds to select oblique and correlated rotations. As such varimax rotations were selected based on these assumptions together with no clear previous discourse that suggests any reasoning to correlate factors.

A scree plot was undertaken to identify the potential numbers of existing factors (see figure 5.12). Field (2003) advises identifying the point at which the scree line is level. The plot displays three to six major factors before levelling off. In addition to this, the Kaiser criterion was utilised in deciding the number of factors that exist. Eigenvalues above 1 were kept. Both the scree plot and the Kaiser criterion indicate the existence of three factors. Moreover Fabrigar *et al.* (1999) highlight that when eigenvalues were utilised in selecting the number of factors, varimax rotations were the most common approach used in the majority of research.

A recommended cut-off point for items within the factor scale is at a factor value below 0.5. The rationale for the nomenclature of management archetypes was drawn from the literature. As such factor analysis provided the following results.

Table 5.43 Cronbach Alpha Score and Bartlett’s Test of Sphericity on Question 21& 23

	Question 21	Question 23
Cronbach Alpha	0.773 (n = 27)	0.534 (n = 14)
Bartlett’s Test of Sphericity	0.000 (df = 351)	0.000 (df = 91)

Figure 5.12 Scree Plot for Question 21

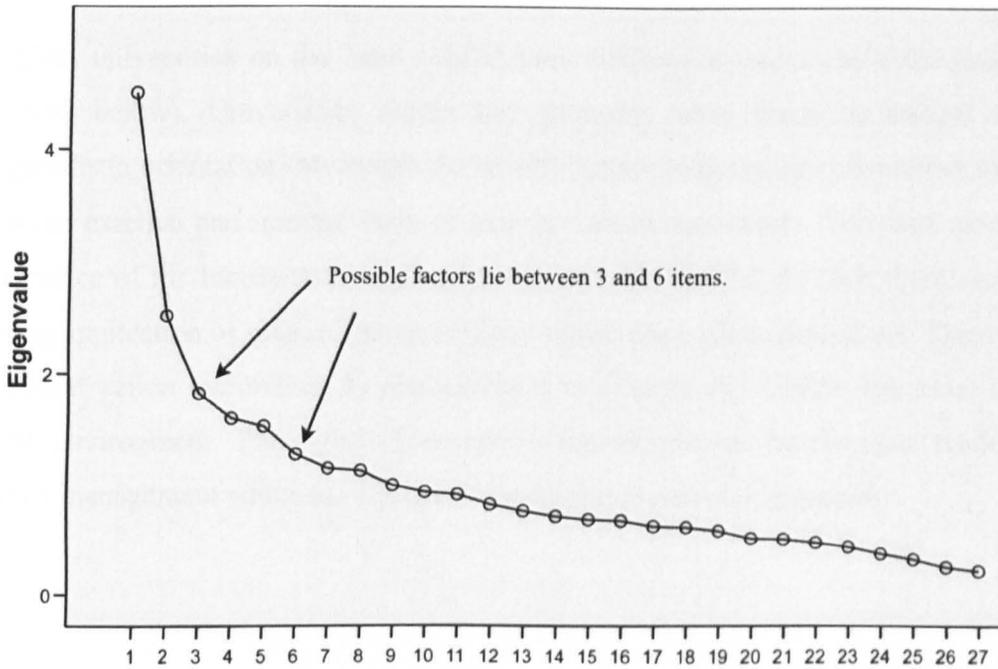


Table 5.44 Archetypes highlighted by factor analysis results on Question 21

	Managerial	Collegial	Bureaucratic
HE seen as a business	0.79		
University education seen as a product	0.77		
Increased focus on profitability in HE	0.72		
Universities more commercialised	0.66		
HE to educate individuals		0.70	
University focus on welfare		0.62	
Research for betterment of society		0.62	
University focus on imparting knowledge		0.52	
Postgraduate students reduce financial restraint			0.74
International students help improve University income			0.59
Higher student numbers mean more money			0.53
Eigenvalues	4.53	1.27	1.14
Variance explained	17%	5%	4%

Factor analysis undertaken on Q21 revealed three archetypes to exist within the question set (see table 5.44 above). These include the managerial, collegial and bureaucratic model. The results indicate that UK universities exhibit some form of these management archetypes. A further factor analysis was undertaken utilising each individual university type as a variable.

Ancient and red brick universities were utilised as factor analysis variables but revealed no significant factorial results.

Plate glass universities on the hand exhibit four different management archetypes (see table 5.45 below). Universities within this grouping were found to exhibit strong managerialistic orientation. Moreover the results further indicate this orientation to exist both as an external and internal form of managerialistic tendencies. This was alongside the existence of the bureaucratic and organised anarchy models. As such there seems to be strong application of managerial archetypes within plate glass institutions. These exist as remedial action undertaken by management to remedy the effects that exist in the external environment. Plate glass universities further present bureaucratic tendencies within its management structures alongside an organised anarchic approach.

Table 5.45 Archetypes highlighted by factor analysis results on Question 21 – Plate Glass University Segmentation

	External Managerialistic	Internal Managerialistic	Bureaucracy	Organised Anarchy
HE seen as a business	0.85			
Pressure to improve student numbers	0.80			
Increased focus on profitability in HE	0.80			
University education seen as a product	0.60			
Top-up fees increasing competition		0.76		
Funding restrictions have forced University scientifically managed.		0.65		
Top-up fees causing increased commercial focus		0.64		
Universities moving away from collegial structure		0.63		
Higher student numbers mean more money			0.87	
Older Universities more research intensive			0.66	
Postgraduate students reduce financial restraint			0.61	
New University focused on increasing student numbers			0.54	
International students help improve University income				
Universities more commercialised				0.71
University focus on imparting knowledge				0.66
Increased marketing at Universities				0.60
Increased pressure to be research recognised				0.59
Eigenvalues	5.83	3.19	2.41	1.72
Variance explained	22%	12%	9%	6%

New universities on the other hand exhibited managerial, discipline based and bureaucratic models (see table 5.46 below). This indicates a prominence in managerial tendencies together with a focus on bureaucracy and research to exist within the range of management structures within the new university grouping.

Table 5.46 Archetypes highlighted by factor analysis results on Question 21 – New University Segmentation

	Managerial	Discipline Based	Bureaucratic
HE seen as a business	0.83		
University education seen as a product	0.80		
Increased focus on profitability in HE	0.60		
Universities more commercialised	0.57		
Universities looking for non-govt funding		0.68	
Older Universities more research intensive		0.65	
Increased pressure to be research recognised		0.65	
Postgraduate students reduce financial restraint			0.76
Tuition fees reducing student numbers			0.60
Higher student numbers mean more money			0.53
International students help improve University income			0.50
Eigenvalues	4.73	1.94	1.75
Variance explained	18%	7%	6%

While the results indicate the existence of certain management archetypes within UK universities and has further identified the structures that exist within plate glass and new universities, it is important to note the exploratory nature of these findings.

Moreover while it is common to utilise previous theoretical discourse to examine the number of potential factors and iterations, the very contributive and novel scope of this research project recognises a lack of existent theories. As such, where other studies which utilise both exploratory and confirmatory factor analysis may have *a priori* assumptions on the number of factors and iterations, as this study is the first to amalgamate the different external forces to examine their effects on university management, little theory exists to enable pre-determined input of the number of factors and iterations. While this may be an unfortunate limitation to the application of findings, these limitations have been highlighted in section 6.10 and provide scope for further research.

A number of other iterations (at 5, 10 and 15) and number of factors were tested, but revealed little to no difference from the displayed findings. Variables excluded as part of the data reduction process can be found in Appendix 13.

5.4d Commentary on results of quantitative data

This section of the chapter summarises the different quantitative results drawn from the questionnaire phase of the study. The following conclusions can be identified from the findings of this stage.

- There currently exists managerialistic tendencies in all universities

The results highlight an increased assimilation and orientation of managerialism and its practices in all universities groups. New universities were the group that more frequently highlighted this, followed by red brick universities.

While both new and red brick universities display a more prevalent existence of managerialistic tendencies, ancient and plate glass universities have indicated similar results albeit less strongly.

- Disparity in views amongst the different university types.

While the above may indicate a universal move towards managerialism, ANOVA results have identified disparity in views to exist, the majority of the time, against older and younger universities (see chapter 5.4c.4.3).

Moreover rather than differences existing between the binary groupings of traditional and new universities, differences seemingly arise against older and younger university typologies. The results indicate differences in opinions from older ancient and red brick universities against younger plate glass and new universities. The trend presents findings of younger universities rating more in agreement of the changing focus and issues affecting their institution. The older institutions tended to rate differently.

- The existence of prevalent structures at specific university types.

The results further highlight the existence of three models of university management within the sector as a whole. These include the managerial, collegial and bureaucratic model (see factor analysis chapter 5.4c.5). Additional statistical tests further revealed that

plate glass universities exhibited both internal and external managerialistic models, bureaucracy and organised anarchy structures. Moreover new universities were identified to contain managerial, discipline based and bureaucratic models.

HOMALs results (while less statistical strong) indicate that management structures at ancient universities closely correspond to discipline based models, where red brick institutions are more focused on accountability (see chapter 5.4c.2).

- Funding challenges

Quantitative results display complexities in effective management and selection of funding streams. The findings indicate that selection of one stream of funding not only reduces the importance of another, but also often tends to be at its expense (see bivariate results chapter 5.4c.3 or table 5.12). This highlights the restrictive nature and availability of funds for universities to receive and bid for. If universities seek more research funding this is at the demise of monies received from teaching activities. Similarly if institutions sought more funding from international students, there is less priority given to national sources of income.

- Continued focus on welfare

While quantitative results may indicate a proliferation of managerialistic culture, changing organisational structures and changes with funding, the findings reflect a strong basis of welfarist ideologies continuing to exist within UK universities. The majority of staff members agreed that their institutions were very much research driven and focused upon developing student careers, indicating a strong base of traditional university ideals and education as beneficial to society. Moreover there was strong importance placed on teaching quality and emphasis on academic work

- Differing opinions from different staff groups.

While ANOVA tests revealed statistically significant findings in terms of staff groups, the majority of differences in opinions exist between university senior management groups, lecturers and administrative staff. There were less difference in rating scores from the

other groups of faculty senior management, administrative management and professors/readers. The results indicate strong agreements to lie with the lecturer and administrative staff groups with more disagreement to emanate from university senior management.

5.5 Interview findings stage 3

This section details the different issues identified qualitatively through the interview phase of the study segregated by university types and then by staff groupings. Interview findings are examined to identify the existence of prevalent and triangulated issues. Utilising directed content analysis (Berg, 2009) coding of interview data was undertaken while reflecting on the issues identified in previous stages of the research (see chapter 3.11b and table 3.3).

As such interview findings were coded and analysed based upon the identified external factors during the exploratory and quantitative research phase of the study. This provided a starting point by which appropriate content was coded. A semi-structured approach was undertaken during interviews, utilising a predefined set of themes but allowing leeway for responses to develop. Appendix 14 displays the interview themes.

The section below examines the issues uncovered by university typology segmentation. It then continues to examine similar issues segmented based upon the different existing staff hierarchies.

5.5a Interview findings – University typology segment.

Table 5.47 below details the paragraph counts for the various issues based upon university typology, clearly displaying the different triangulated issues that were identified from the interviews. These thematic issues were found to exist between the different university types, thus ensuring data triangulation as highlighted in chapter 3.19 and table 3.9. As the approach was semi-inductive in nature, the usage of a structured display of codings and triangulation provides a means to display interview data against the identified external forces. This, as part of directed content analysis (see table 3.3), provided a starting point for issues to be examined while not restricting the researcher in

the identification other emergent themes. Miles and Huberman (1994) highlight this method as a form of data analysis and display commonly utilised when content analysis is undertaken.

Figure 5.14 details triangulated issues highlighted by all universities with figures 5.15, 5.16, 5.17 and 5.18 providing a breakdown of ancient, red brick, plate glass and new university concerns respectively. Figure 5.13 provides a key to the diagrams. Evidence for these triangulated themes can be found in Appendix 6 – 9.

Table 5.47 Triangulated interview issues based upon university type

Triangulated Issue	University Type				Total
	Ancient	Red brick	Plate glass	New	
Collegial	13	7	8	6	34
Government	5	5	3	2	15
Commercialisation	13	16	17	40	86
Managerialism	10	11	12	18	51
Welfare	26	13	15	15	69
Funding	23	23	20	25	91
Management	22	17	7	45	91

Figure 5.13 Key to interview figures

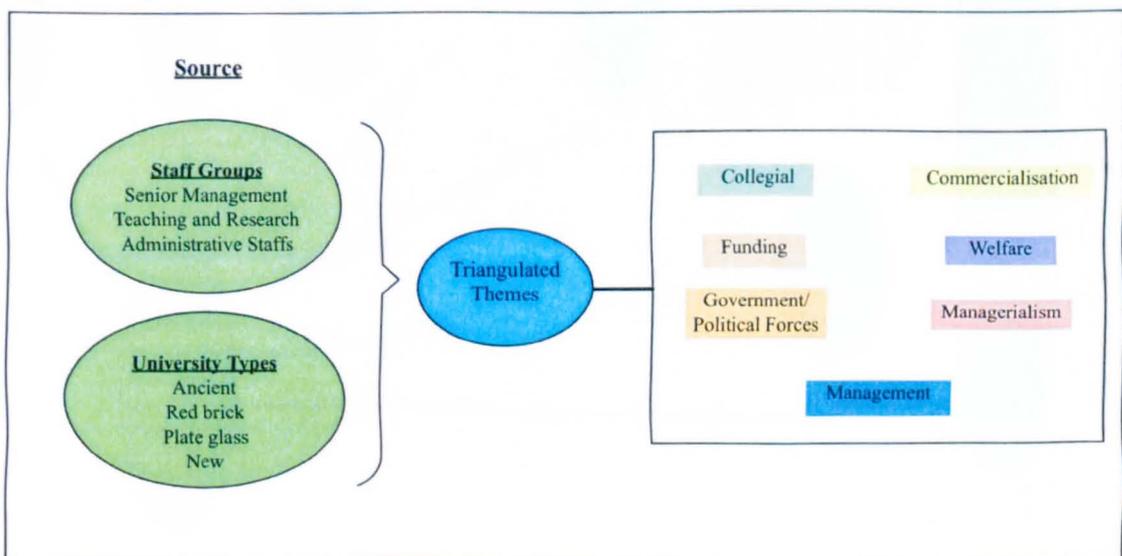


Figure 5.14 Triangulated Interview Findings - All Universities

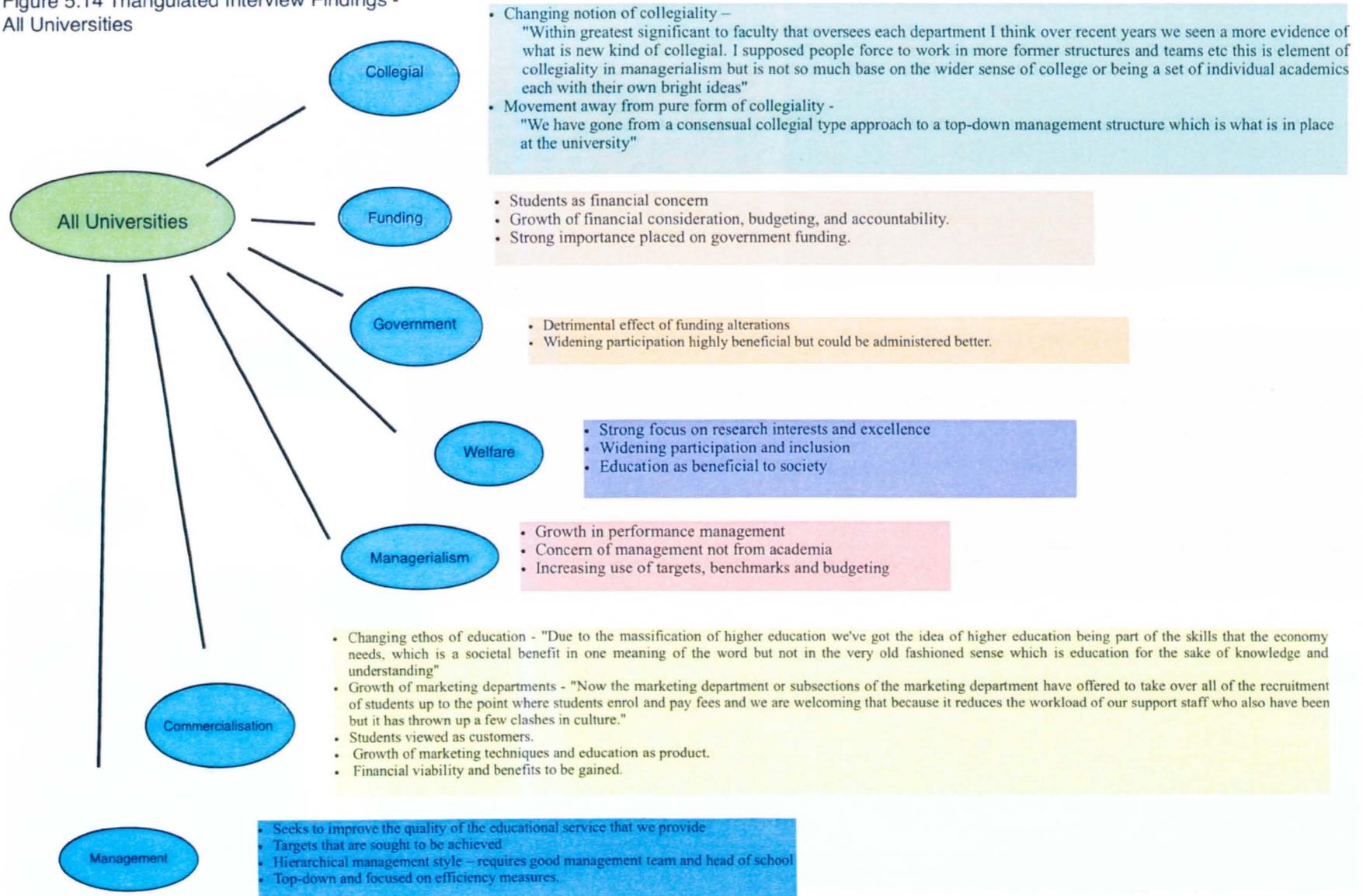


Figure 5.15 Triangulated Interview Findings - Ancient University Breakdown

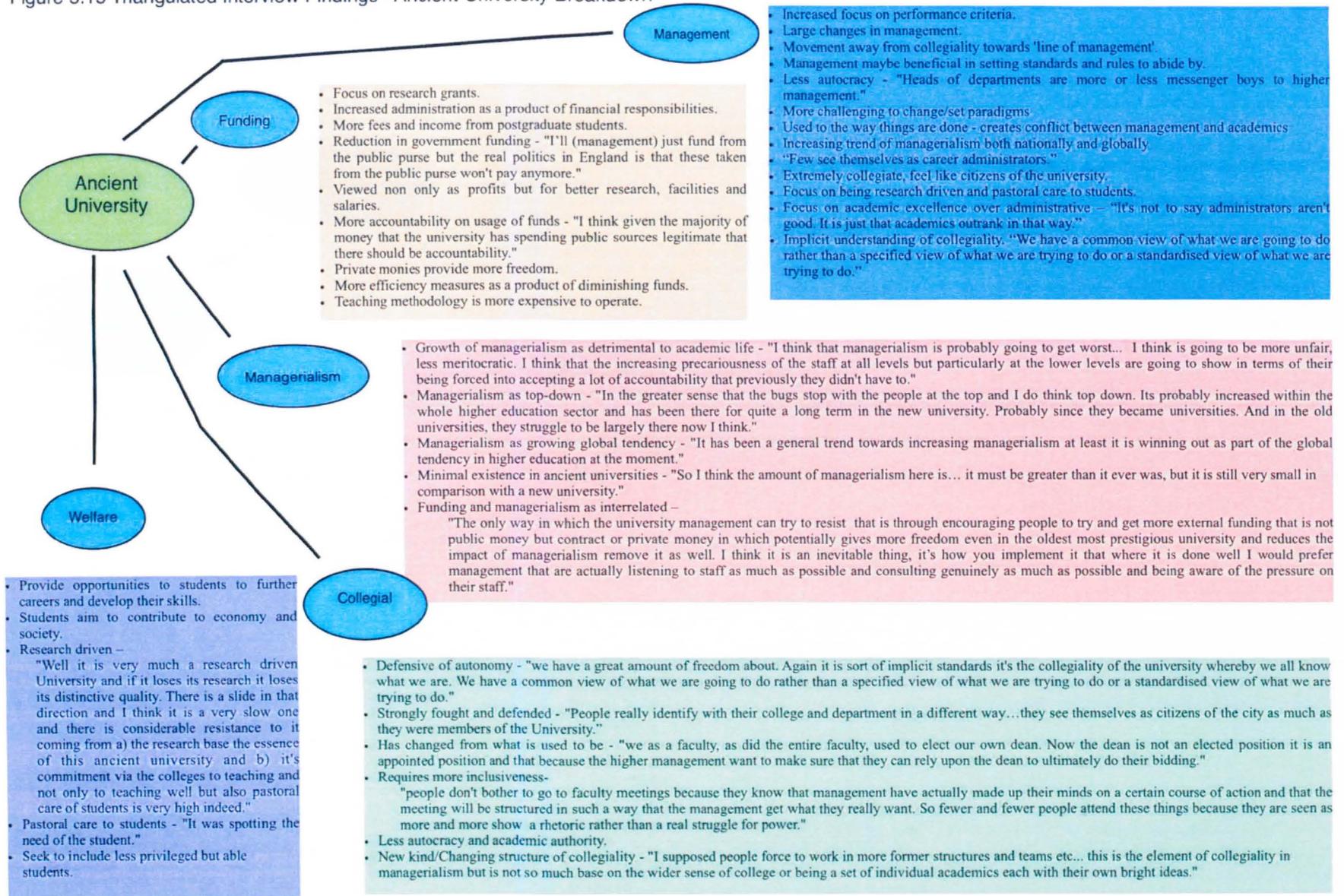
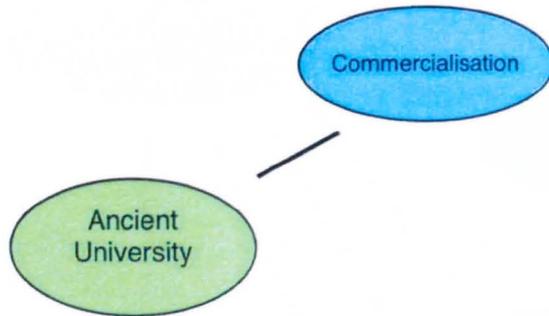
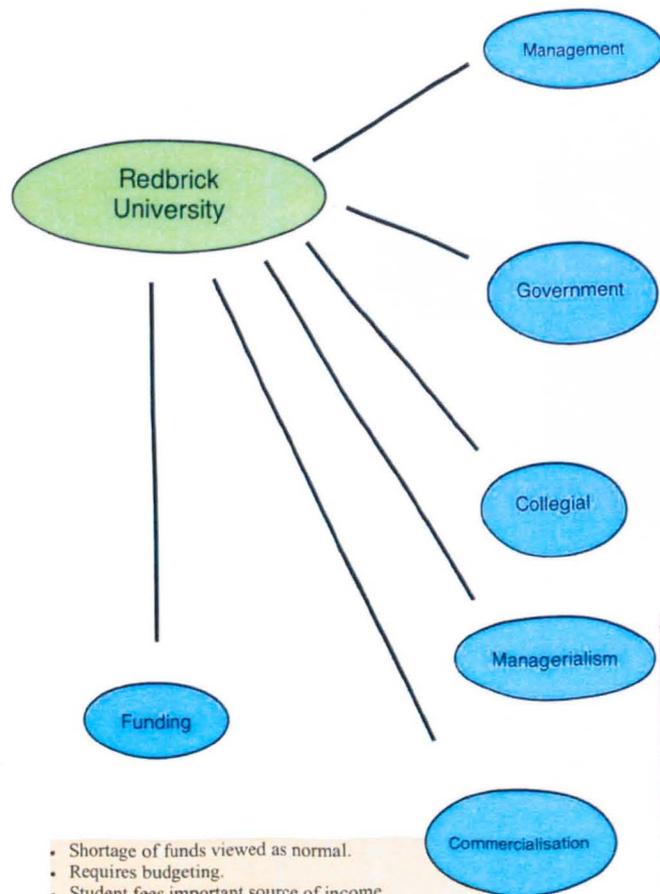


Figure 5.15 Triangulated Interview Findings - Ancient University
Breakdown continued



- Management hierarchy that increasingly reflects private business.
- Education seen as a commodity - "Students are encouraged as consumers in the way make decision. The way on where to go? what to study? Would they get their job? What are the prospects of their degrees? What is worth of their degree from the university X compare to this degree university Y? All these things in fact are turning education into a product, commodifying it. That is part of the wider global trend of commodification."
- Pressures for international recruitment - "I think we are being increasingly ordered to have as many overseas postgraduates as we can because they bring comparatively more into the university."
- Increased marketing -
 - "In a complex society I think you have to do it but what marketing is aimed to doing increasingly is to capture particular students for your university with the consequence that they don't go elsewhere. So it's become part of a whole competitive set of structures."
 - "It is always there people were not explicit about it. Oxbridge for example has got a very good marketing since the middle ages - reputation that's been their marketing."
- As part of income generation but requires clarity of values - "commercialisation is generating income its become very important. That again can be good or bad thing is inevitable given the current context but it is important that the university chosen values when their commercial activities get involved in or not."
- Commercialisation as part of management push.
- Universities are becoming more business-like - "They have to balance their books and prepare the time and has become more difficult over recent time so it change the nature of how the university runs. I don't think it changes the fundamental purposes of the university are and their role in education and research, more of the nature of operation has change rather than the underlining purpose."
- Commercialisation as part of fund-raising - "We have to make commercial deals to fund progress in science."
"We're not a slouch when it comes to joint ventures."
- Quality benchmarks - "Attracting the best overseas students we can and we get some very good ones and not attracting the less able ones who have the money and are desperate to come."

Figure 5.16 Triangulated Interview Findings - Redbrick University Breakdown



- Shortage of funds viewed as normal.
- Requires budgeting.
- Student fees important source of income.
- Need focus on financial implications.
- Targets and goals to meet.
- Prominence of HEFCE funding.
- International students as "cash cows."
- Increasing financial focused - "They have that kind of financial imperative in that sort of business model is becoming more and more apparent but I hope that it doesn't become too dominant because after all our primary function would be education and a lot of the students."

- Seeks to improve the quality of the educational service that we provide.
- Career progression - "you progress on the basis of your research."
- Tight budgets - "It is quite difficult to take an effective defensive stance due to the way the administrators control the budget."
- More conscience of financial implications - "Kick people of the programme if they are not paying."
- Targets that are sought to be achieved.
- Hierarchical management style - requires good management team and head of school
- Managers with some academic background or understanding would be better - "It is my impression that where there is significant opposition to a move it is either not implemented or there is further genuine discussion. The only area, which I think, that doesn't necessarily work is in relation to finance."
- Top-down directive.
- Would benefit from better collaborative measures between management and academia.

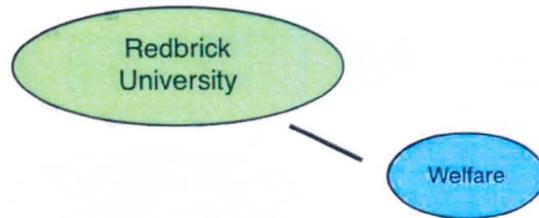
- Widening Participation Initiatives hugely beneficial - "Widening participation students are usually great value in the classroom"
- Widening participation needs to be undertaken earlier, possibly during schooling.
- Detrimental effect of funding alterations - "The main thing that has had a detrimental effect is the general under funding of the higher education sector. Some things have had a positive effect and one thing is the research assessment exercise because it does actually make people accountable for the research part of their job"
- Government targets seen as secondary - "I think the betterment targets are part of an internal audit. They aren't directly driven by government targets of QAA or RAE. Its come about because of internal audit"

- Some element of autonomy exists - "in terms of publishing books or journal articles there is less autonomy over that, it is expected that everybody should publish their research."
- Changes in collegiality as a factor of new forces and capacity -
"I think the main threat to the collegiality of traditional structures is the fact that during the period of collegiality there were far fewer professors and lecturers and they had far less work to do and much less was expected of them. If you're not working at full capacity it's easy to be collegial."
- Basic functions of teaching and research are still required alongside new administrative duties.
- More evident in certain areas - "Collegiality is much more evident within departments and some departments are better than others."

- Positives to be gained for appropriate implementation -
"I think there are degrees and I think one of the problems with polarising professionalism and new managerialism and so on and so forth, there's a tendency to neglect the positive things that have come out. I like efficiency; it's the kind of person I am. I like have systems, mechanisms and good quality data, in terms of income and numbers and where and what programme so in that sense, I can contrast the head of department we had before and I don't think he was particularly collegial and he definitely was managerial, he was completely laissez-faire."
- Managerialism as a necessity -
"You've got ensure a based level of income from doing certain things you might not necessarily agree with, in order to buy time for the things that aren't profitable but are really important. You can't do it the other way around. If you only focus on things that are not profitable but important, you won't be around any longer."
- Desire to undertake research but unable to do so.
- Greater sense of corporate identity.

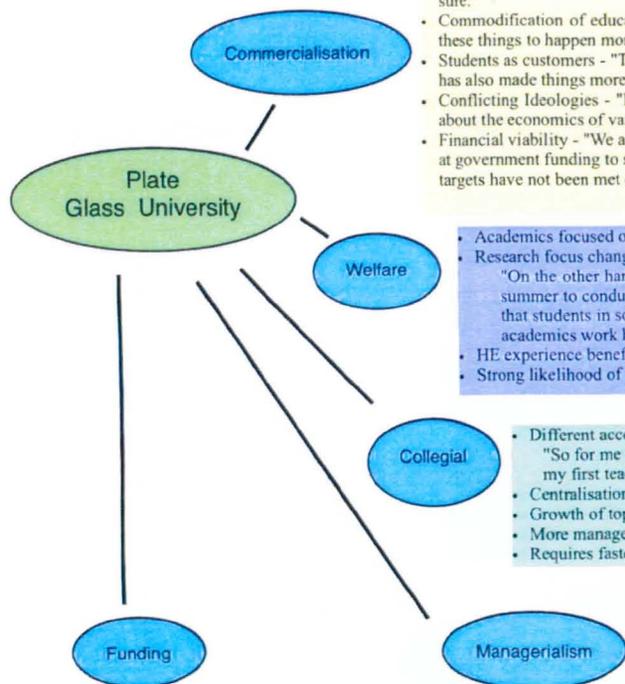
- Accountability to public monies - "I think that the obligation to account for how you spend public money is very important. Whether you do that through using commercial models or other accountancy models is more of an open question to me. I think that universities are businesses but they are not only businesses in that they perform an important public function."
- Changing ethos of education - "Due to the massification of higher education we've got the idea of higher education being part of the skills that the economy needs, which is a societal benefit in one meaning of the word but not in the very old fashioned sense which is education for the sake of knowledge and understanding."
- Growth of marketing departments - "Now the marketing department or subsections of the marketing department have offered to take over all of the recruitment of students up to the point where students enrol and pay fees and we are welcoming that because it reduces the workload of our support staff who also have been but it has thrown up a few clashes in culture."
- Increased focus on recruitment of international students alongside usage of student satisfactions surveys.
- Students as customers.

Figure 5.16 Triangulated Interview Findings - Redbrick University Breakdown continued



- Strong emphasis on widening participation - "I think it's hugely beneficial. This university takes widening participation very seriously. Widening participation students are usually great value in the class."
- Education as part of skills needed in the economy which is also beneficial to society and primary role of universities.
- Students, as paying customers, more willing to voice needs and concerns.
- Education as public good –
 - "Personally, I believe in the power of education to enable people to think in different ways, which will enhance the quality of their lives in every area for the rest of their lives. My job in enabling people to develop rigorous habits of mind, to develop sound research skills so in the future they are able to investigate and analyse a problem in a way that will lead to potentially beneficial outcomes. So for me it is not practical, it's not technical, it's not painting by numbers, it is developing habits of mind that will then apply to everything they look at for the rest of their lives. The questioning and enquiring and criticality, so that in a sense is a social good but I'm not as strong an advocate of the social justice as a lot of the people I work with."
- For betterment of students –
 - "I can be every bit as effective but I'm doing it for the money and I still feel that I'm doing it for the money, but when I came back to the UK I was surprised that my view was very much in the minority and I met a lot more people than I had elsewhere that do it for the absolute highest altruistic reasons. The vast majority of my colleagues and I have no reason to doubt them, do it for very, very altruistic reasons. The classic example for me would be, if I won the lottery I would give up work tomorrow and the majority of the people I work with I don't think would because they see themselves as their work in a different light and they would still, maybe a little less of it, but do it not for themselves or for the money but they want to make a difference in their students' lives."

Figure 5.17 Triangulated Interview Findings - Plate Glass University Breakdown



- Growing emphasis on performance measures.
- Pressure to be recognised/perform - "I think for the university as a whole it has direct financial implications and that's why they are keen to push it but also that there is indirect financial benefit in terms of good scores in RAE move universities up league tables. Therefore the higher up the league table the higher the university will be able to make their fees."
- Increased marketing - "We do spend an awful lot of money and resources on marketing. Whether that time and resource well spent in terms of marketing I'm not so sure."
- Commodification of education - "I think the future is more prescriptive, commodified and deprofessionalised. I think these things happen because academics allow these things to happen more so than having these things hoisted onto them."
- Students as customers - "The introduction of tuition fees has also had an impact on the type of relationships that students perceive that they have with institutions which has also made things more commercial."
- Conflicting Ideologies - "Education and the pursuit of truth are important and paramount but when you're working on a business model you have to think a lot more about the economics of various activities. These two things can sometimes be in conflict and the trick for universities is to find a balance between those things"
- Financial viability - "We are very concerned about whether courses make money or if each individual component of a course makes money and we are always looking at government funding to see if it's going to be reduced or increased, all these questions come into the equation." / "One tends to lower the entry requirements when targets have not been met or where the recruitment is just getting too difficult."

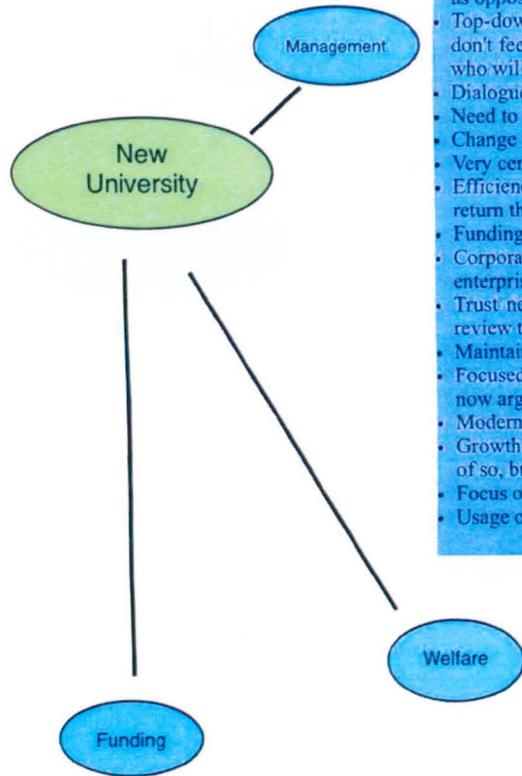
- Academics focused on knowledge generation.
- Research focus changing towards commodification - "On the other hand, if you look at the academic, the impact may be more negative. Many of the things we have taken for granted in the past - long breaks over summer to conduct research and shorter times in the classroom so as to be able to do other things - those things will diminish over time as a result. The benefit is that students in some places will get a genuine world class education and the drawback is that academics may have to work harder. Whether it is a drawback that academics work harder, I'm not really sure."
- HE experience beneficial to students - "So I think there are significant benefits to students and their whole experience at University will improve as a result of it."
- Strong likelihood of career advancement for students.

- Different acceptance of collegiality - "So for me collegiality and getting support for those things is less important than maybe it would be if I was 23 years old, with a recently completed PhD and my first teaching job. It kind of depends of where you are in terms of your career. It depends on lots of things I suspect."
- Centralisation of power to upper management.
- Growth of top-down management.
- More management less consultation.
- Requires faster decision-making and streamlined management.

- Greater emphasis on management - "There is a much heavier emphasis on management now than there was 20 - 30 years ago. It's not something that has happened post 1997 with this government but it is something that has been creeping since the late 70s earlier 80s "
- Incompatibility of ethos - "We tried but much of the management performance regimes that we have are very much private sector practices attempted to be imposed on the public sector. The outcome of doing performance management in the university or in a faculty like ours is very different to how you would do it in a business because I don't think there's necessarily the match between the mechanism and the organisation is enough in terms of things such as performance management and other types of micromanagement."
- Differing opinions based on staff positions - "I think a lot of academic staff would say yes and a lot of management staff would say we haven't gone far enough in terms of things such as performance management and other types of micromanagement."
- Differing experience and backgrounds - "There was some concern amongst the staff that they would get an individual from a commercial background rather than academia but it was quickly established that in this university wanted somebody who'd been in academia."
- Less managerialistic than newer universities.
- Advantages to learning from private sector - "I think it is good to increase the range of abilities in the university. We have a lot to learn from the industry, government service and so forth but we do know that when such individuals arrive, they have certain skills that are useful but that may not always be the case."
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- Students numbers as financial concern - "When I was going to university there was talk about universities dropping their bottom 10-20%, now students are seen as an income source and if you lose your income source you lose your funding. So every effort is made to keep our students with us. Certain targets are set, such as pass rates should be 90% (in our case) or above and if it is below that questions will be asked. So retention is very much an issue. One tries to work out the reasons for low retention, is it overseas students - do they need remedial English, do people need extra tutorials. So that type of system is in place."
- Accountability to funds and targets.
- Importance placed on government funding amounts.
- The cost of tuition fees and financial concerns to students - "The biggest reason you have students dropping out is because they just can't afford to continue."

Figure 5.18 Triangulated Interview Findings - New University Breakdown

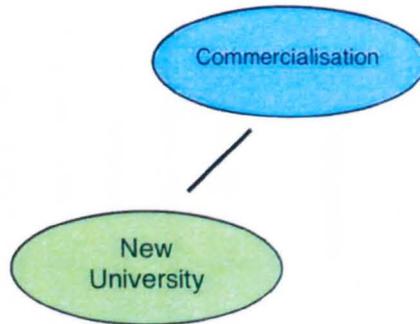


- Costing and segmentation of funds linked to university strategies.
- Growth of efficiency measures as a product of budget cuts.
- Funding agencies have encouraged good practice.
- Salary and pay as the main financial cost.
- Student fees as major income generator followed by some research-led faculties.
- Require more funding - "Public sector funding in higher education in the UK is not sufficient."
- Bulk funding comes from teaching and learning.
- Aim to reduce dependence on public funds.

- Change in management has had a knock on effect leading to detriment in staff morale - "In terms of the management it has gotten worse. It was slightly inevitable due to certain unpleasant but necessary decisions that had to be made."
- Some changes are unavoidable but there is recognition of a certain level of inevitability but they are very unhappy about how it was done.
- Unhappiness with the old management systems, but when new management arrived, the old didn't seem so bad. - more problems with management goals as opposed to management style.
- Top-down - heavily micromanaged - "I think people like committees; it's a big cultural shift for people if they suddenly move to a situation where they don't feel involved, but what we have done is said that we are not having a committee making the decision. The decision will be made by an individual who will be advised by a group of people and at the end of the day they will be accountable for that decision."
- Dialogue undertaken in 'insincere fashion' - "there doesn't seem to be any real attempt to engage with some of the concerns that are being expressed"
- Need to ensure quality/Culture of quality.
- Change that has emanated from the grassroots.
- Very centralised and bureaucratic system.
- Efficiency measures as part of cuts in funding/budgeting importance - "Viability does not always represent 'say' a 20 per cent return, or the like. It's a return that is acceptable within the context of a University mixed economy."
- Funding changes beneficial - "I believe the funding agencies have helped encourage good practice generally."
- Corporate institution with collegiality - "with collegiality in terms of the way people support each other but not collegiality in the sense of a collegiate enterprise. This University is definitely run as a corporate institution."
- Trust needs to be placed on senior management - "the Board of Governors is entrusted with requirements to balance the books, approve the budget, review the accounts etc but they are also responsible for the educational character and mission of the institution."
- Maintain a broad portfolio of activity.
- Focused on protecting key researchers - "This is a little bit like soccer; you almost have a transfer fees market. Some of our key research academics are now arguably and deservedly very well rewarded for their roles."
- Modern environment requires people to be responsible and accountable - "Accountability has been administered in a humane way"
- Growth of corporate governance - "So I believe a form of corporate style of management is the most appropriate in the UK. I could go on for ten minutes of so, but if you wish me to truncate my view I can't advise of the same argument for the alternative style (collegiality)."
- Focus on efficiency - Need to adept at managing efficiently and respond to needs of the market.
- Usage of business excellence as tools to excel.

- Students have a role in education -
"Universities don't educate people, people educate themselves but universities provide the form to do so and this is just a semantic that it is you that bring the knowledge to us but rather that the environment that universities create is then essentially one where the students are attempting to achieve a particular goal and as such the goal will change a little in a more commercial environment. The students might see their goal as getting value for money and getting a good return in terms of grades and qualifications so that in itself will change the student's perception of what's going on."
- Quality education important amidst realisation of budgets and finance.
- Research as commercially viable - "A number of different initiatives have helped improvement of research activities, which if properly managed in the financial terms, as well as an academic sense, can bring improved returns to the institution."
- Strong interest in education - "So like any other enterprise there should still be lecturers that are interested in education."
- Growth of market culture -
"The primary aim is to achieve good academic standards for teaching, research, technology transfer or whatever the particular drivers are. That definitely comes first. If performing well then benchmark scoring indicates the academic area or University is performing well. Unfortunately you can't stop the way the market operates. In Britain league tables are used increasingly."
- Universities have key roles in economic revival.

Figure 5.18 Triangulated Interview Findings - New University Breakdown continued



- Mass education equates to commercialisation - "I think that the minute that you move away from an elitist view of higher education into a mainstream view that it then becomes a commercial enterprise like any other mainstream organisation or service."
- Growth of marketing techniques internationally and nationally - "They will be attempting to recruit student from around the world as the international market is now seen as a great cash cow due to the higher fees that international student pay. Also there's a keen idea of branding" / "I think it is just a natural progression, I think people will market themselves and will try to show themselves in the best light."
- Education amidst commercialisation –
 - "The lecturers themselves will also be influenced in terms of ensuring that the enterprise remains commercially viable and that there's a feeling of being in the black but to certain degree that itself doesn't preclude education - quality education and it doesn't preclude the students coming here to better themselves" / "The market might be government in terms of the way government dictates what is required. But it's needs to be based on solid academic credentials. That's the one thing I am totally persuaded on as a non-academic. If academic credibility and achievements doesn't meet the required standards no amount of corporate management will provide you with a successful ongoing University because the market will catch you out. So it's quite a complex inter-relationship. So corporate management linked with core academic excellence is actually critical."
- Identifies problematic areas - "One of the benefits of the commercialisation in trying to produce benchmarks and league tables and QAA is that it is harder to hide really poor performers and as such this demand has made universities rise their game."
- Conflicting pressures - "A situation can arise whereby review determines that certain types of academic delivery are potentially more profitable."
- Financial benefits to be gained - "A number of different initiatives have helped improvement of research activities, which if properly managed in the financial terms, as well as an academic sense, can bring improved returns to the institution."
- Growth of budgeting - "Decisions in education are driven by student numbers. There is always a calculation of student numbers, the primary factor that influences money and resources."
- Driven by market forces - "Unfortunately you can't stop the way the market operates"
 - "The focus is to meet demand; basically we're very much in touch with employers as in trying to understand what they need, what the emerging disciplines are"
- Student as customer - "Whether they hold personal funds themselves or the state holds it for them increasingly we regard the student as a consumer."
- Education as product - "Learning and teaching as a process is like any manufacturing process or anything else, it's a process that people go through. "

5.5a.1 Commentary on results of interview findings – University breakdown

Management

While ancient universities had more instances of collegiality and collegial management, there was a strong belief that changes were evident with university management moving towards elements of corporate style management. The other university groups (with the exception of plate glass universities which displayed no triangulated findings in relation to management) all recognised a similar shift towards more highly managed structures.

Political Forces

There was a clear consensus on the benefits of widening participation initiatives by government and a keen focus to continue doing so (more strongly within red brick universities). There were also instances where funding restrictions and quality assurance techniques have been viewed as detrimental.

Commercialisation

Interview results highlight a strong acceptance that commercial ideologies and practices have proliferated into UK universities with new focuses on profitability and accountability. There is also the notion of education as product and student as customers alongside more market orientation. Results further indicate the need for more funding as catalyst to this shift.

Collegiality

All university types highlight a shift away from collegial focuses towards more streamlined and managed structures. Yet older institutions of ancient and red brick still exhibit stronger elements of collegial practice than their younger counterparts. Indeed there seems to be a stronger prevalence of management in plate glass universities with new universities exhibiting little existence of collegiality.

Welfare

Views expressed here strongly relate to widening participation initiatives and a strong sense of learning and research excellence. Responses also highlight views that education would be beneficial to society and the economy. In plate glass and new universities there was a larger focus on changes in the dynamics of higher education (student as customer and its marketisation) highlighting the existence of barriers to the adoption of welfare ideologies.

Funding

The majority of university types highlighted a shortage or lack of funding, seeking other streams to attain sufficient monies. Moreover responses highlight more accountability for usage of public funds and an interest in continued funding from student enrolment and fees.

5.5b Interview findings - Staff position segment.

Table 5.48 below details the paragraph count for the various issues split by staff positions. These triangulated thematic issues were identified among the different staff groups. Figure 5.19 highlights triangulated issues from all staff groups with figures 5.20, 5.21 and 5.22 detailing triangulated concerns of the senior management group, teaching and research group and administrative staff respectively. Figure 5.13 similarly provides a key to the following diagrams. Evidence for these triangulated themes can be found in Appendix 10 – 12.

Table 5.48 Triangulated interview issues based upon staff groups

Triangulated Issues	Staff Positions			Total
	Teaching and Research	Administrative	Senior Management Group	
Collegial	12	15	7	34
Government	6	5	2	13
Commercialisation	22	31	33	86
Managerialism	11	26	14	51
Welfare	29	16	24	69
Funding	26	26	41	93
Management	32	22	37	91

Figure 5.19 Triangulated Interview Findings - All Staff Groups

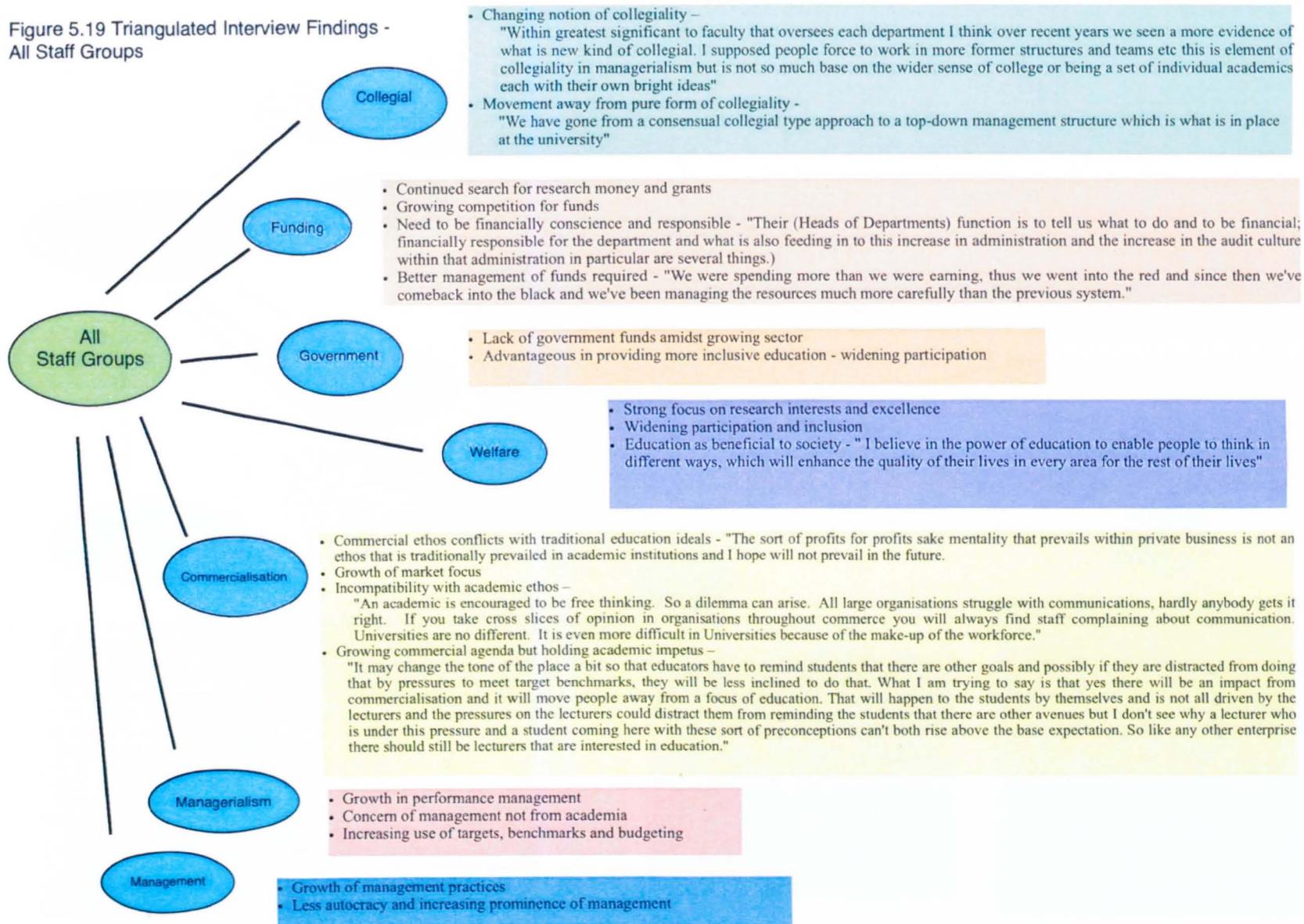


Figure 5.20 Triangulated Interview Findings - Senior Management Group Breakdown

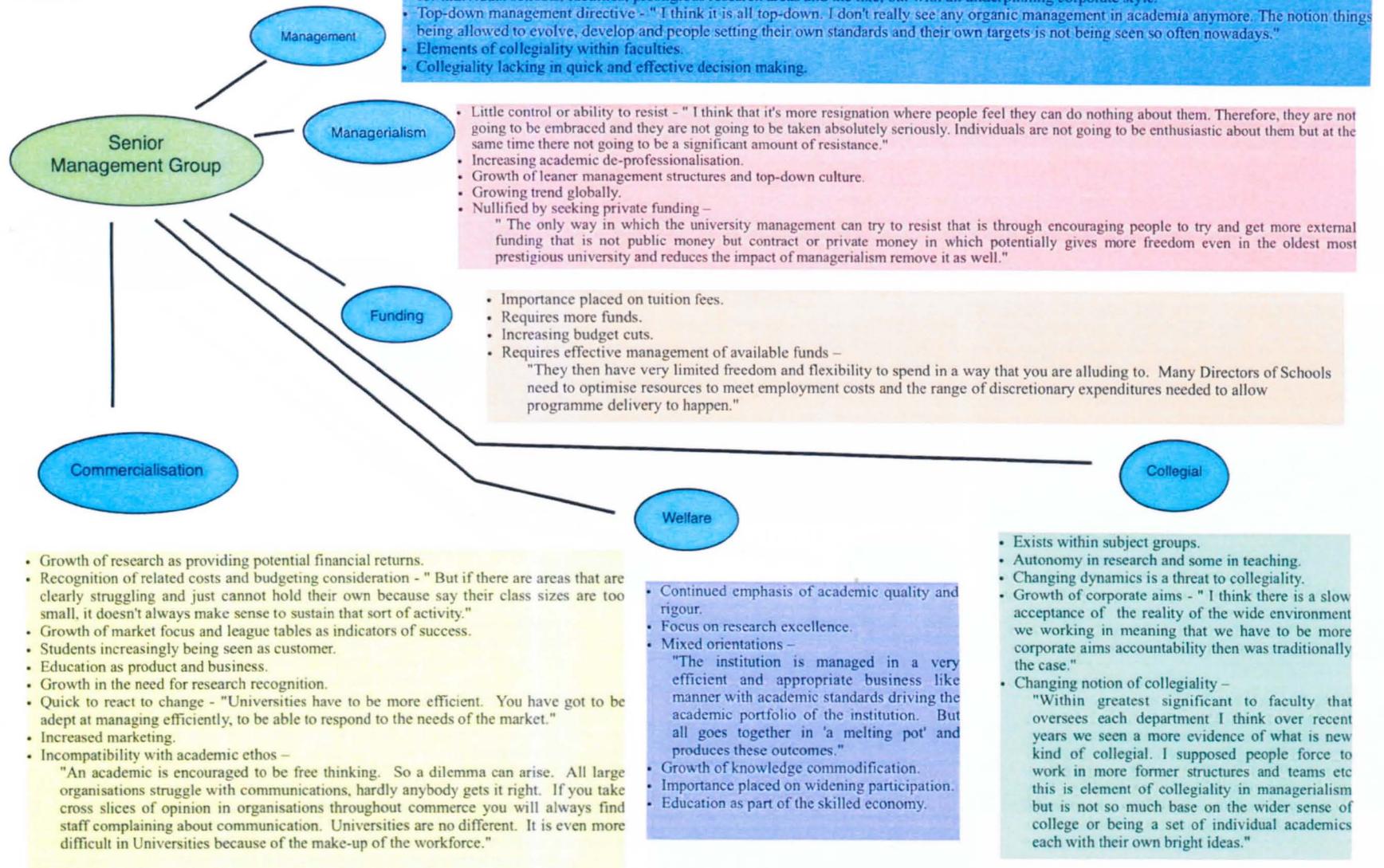


Figure 5.21 Triangulated Interview Findings - Teaching and Research Group Breakdown

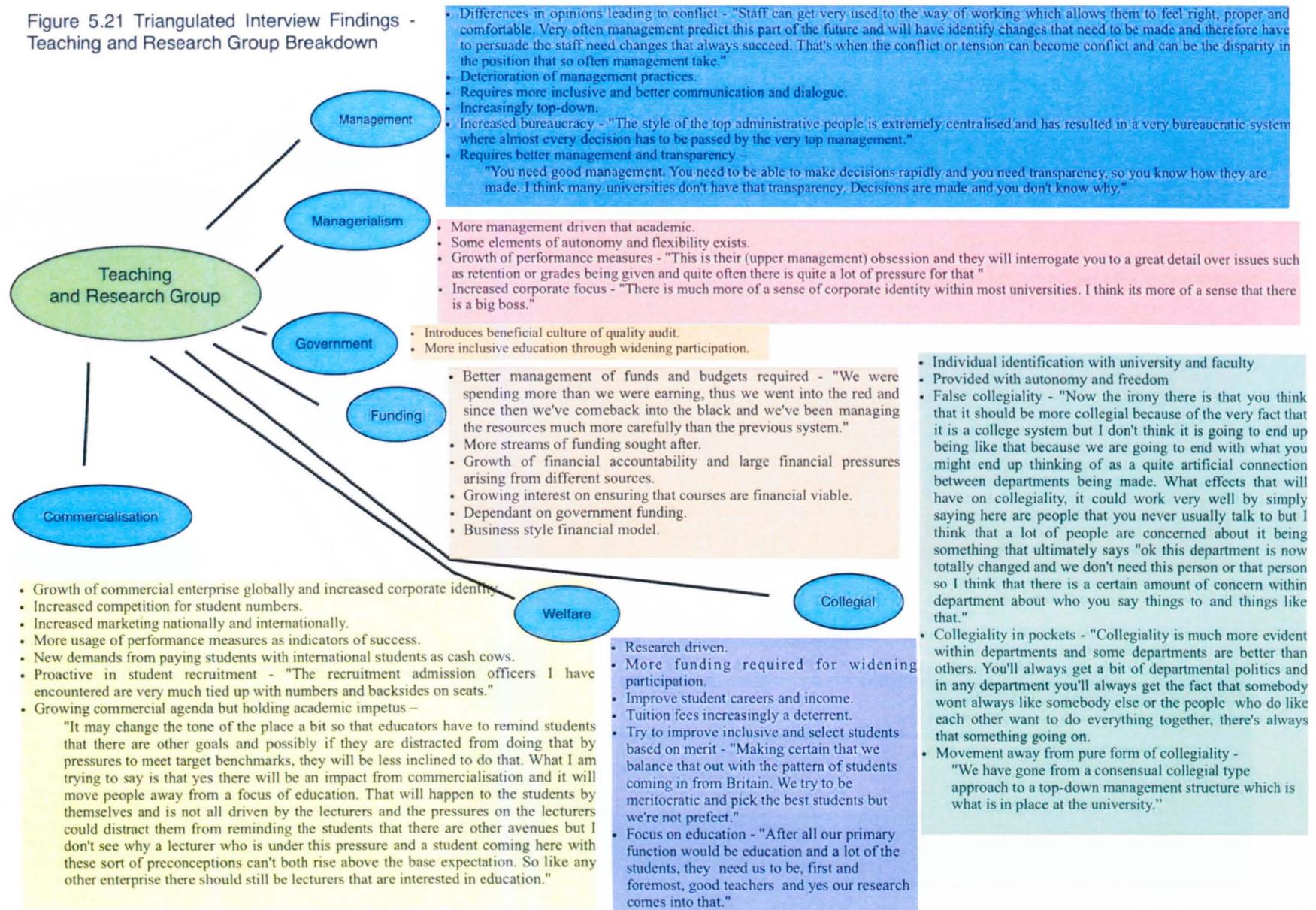
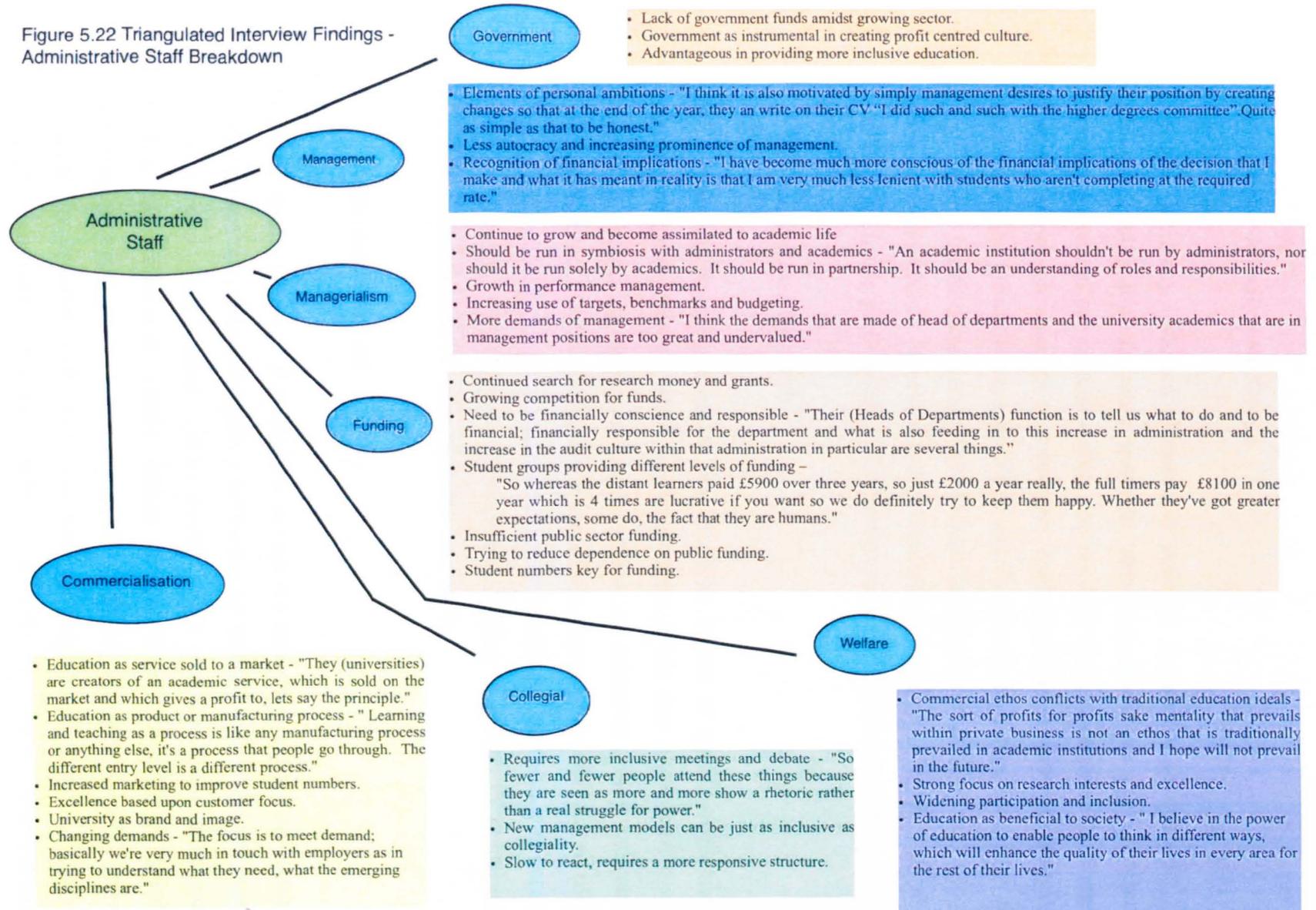


Figure 5.22 Triangulated Interview Findings - Administrative Staff Breakdown



5.5b.1 Commentary on results of interview findings – Staff breakdown

Senior Management Group

This staff hierarchy indicated elements of collegial approaches to exist but further highlighted shifts towards more managed structures. Moreover they expressed an increased growth in commercial culture and need for recognised research. There were numerous views on students as customers and education as product, alongside an indication of the growth in managerialism and its effects on management. They further recognised the increased corporate ideologies utilised together with the importance placed on acquiring more funds. Nonetheless they highlight an interest to continue with scholarly excellence, widening participation and education as part of a skilled economy.

Teaching and Research

Staff within this grouping accepted the beneficial culture of quality audit and more inclusive education through widening participation. While they highlighted movement away from collegiality there remained elements of autonomy. They indicated that although there was increased top-down management, commercial enterprise of education globally and marketing alongside extensive student recruitment practices, that universities were still research driven. Moreover responses indicate a growth of managerialistic practices amidst elements of collegiality and autonomy.

Administrative Staff

Interview results highlighted a keenness to improve inclusivity of all staff members in committee and discussions alongside a preference for research excellence and improving student careers. They further voiced concern over proliferation of managerialistic practices and commercial agendas amidst the growth of ‘university as brand’ and increasing consumer demands. Responses also indicated shortages in funds, growth of accountability together with more top-down management. Alongside instances of increased bureaucratic practices, there were calls for better management and transparency.

Chapter 6.0 Discussion

6.1 Introduction

The study aimed to better understand and highlight new prevalent issues affecting the management and structure of HEIs, seeking to provide current interpretation and examination of the forces impacting the sector. The research focused upon:

- To identify significant areas of change with regards to HEI structures and management
- Exploring the different external forces that have been a catalyst to changes in HE management.
- Developing a representative framework of different forces that affect university structure.
- Identifying archetypal forms of university management style as a product of prominent external forces that affect the different university types.

A more detailed explanation of each objective and its intentions is detailed in chapter 1, which provides an overview of the scope and aims of this study.

This chapter aims to discuss the findings from the different stages of the research and seeks to amalgamate the prevalent issues, forces and effects on university management. It examines the dominant structures within universities, the changes within management and the increasing effect external environmental forces have on university management and orientation.

6.2 Examination of structures

It was important to historically review the changes in university structures as changes from traditional collegial orientations altered and transformed as both a product of external forces and new needs. Indicative of such changes were the dilution of importance placed upon collegial traditions and ideologies (viewed as dated and at times archaic) towards more modern corporate, quick and commercially focused paradigms. The changes towards either more socially linked orientation as the discipline based model

exhibits (through promoting more research centred and academic associated management) or managerialistic tendencies emphasising business-like concentration have emanated as a product of external environmental forces creating a need for change.

The stronghold of collegial importance and scholarly autonomy is increasingly challenged by new needs for accountability, flexibility and administrative discretion. The entry of bureaucratic structures that emphasise administrative control and scrutiny alongside the notion of a garbage-can approach or organised anarchy highlights a shifting and growing diverse archetypal management style that exists in UK HE. The extant literature indicates a strong culture of collegiality and autonomy during earlier periods of university management, while the findings of this study highlight the implementation of market orientated mechanisms. While the study is not longitudinal but rather cross-sectional in nature, the change from what was then and now indicates a different management approach in universities today as compared to previously. Moreover data triangulation has identified and highlighted these differences i.e. a move away from academic autonomy.

The discourses suggest a growth of unity or blurring of lines as management structures and techniques coalesce and merge into what works best. Another clear observation is the existence of substructures in university management among university hierarchies. Seemingly collegiality may exist (for example) within lower level staff where managerialist tendencies exist in upper management (see interview findings chapter 5.5b). This diversity extends to different departmental groups with the university hierarchy where collegiality may exist strongly in different levels with differing ideological practices in management. This ratifies Birnbaum's (1988) position who posits that culture can and is often influenced by other prevalent "supersystems". Certainly more complex permutations of these can and at times do exist as little groups or pockets of staff operate differently and potentially covertly under the premise of accepted norms of the larger entity as a whole. It would be worthwhile for further research to examine these in greater detail.

What is essentially clear from the findings of this research is that changes in university management are ongoing. Yet it is also true that some structures have weathered the environmental forces that exist and circumvented the need to assimilate new management paradigms. This difference has strong association with the age of university in question.

The triangulated findings from all 3 research phases provide valid evidence of these associations. While it is unable to highlight any causal links there exists a relationship between the various issues and university typology.

The majority of older universities (viewed and perceived as collegial in nature) do strongly resist the pressure and at times temptation to assimilate more current organisational structures (see chapter 2.27).

Nonetheless Tapper and Palfreyman (1998) highlight Oxbridge's history as reminiscent of gentlemen's clubs (see chapter 2.27). Similarly Gray (1989: p124) asserts the collegial approach to highly reflect an "old boys club," essentially "setting up their own criteria for recruitment, often in a markedly incestuous way".

This view is perhaps less shared by newer universities especially those that have existed post-1992. The clarity received from clearly demarcated hierarchies and chains of command provide a structure that is rather more transparent and unambiguous, enabling issues to be both brought up and resolved. Indeed the organisational mindset is one that steers towards meeting benchmarks and set standards, perhaps a more mechanistic way of doing things. The argument occurs it is inherent lack of autonomy and over-zealous control over academic freedoms. The incompatibility of academe against a backdrop of private sector centred content generates strong uncertainties about its application in universities.

The difference in university types also yields different results in terms of association with particular models of management. Oddly where ancient universities were seen as traditionally collegial the results of this study highlight a closer relationship with discipline based models of management and a focus on being research driven (see HOMALS results in chapter 5.4c.2 and figure 5.10). New universities on the other hand are more reflective of their perceived organisational model and are not only strongly bureaucratic but market responsive indicating a strong relationship with their origins under local education authority control.

What is further clear from the results is the existence of a relationship between plate glass universities and the political organisation pattern of management indicating the

negotiating culture that occurs within organisational dynamics. This is highlighted by HOMALS results in chapter 5.4c.2.

The results also highlight another irregularity in red brick universities exhibiting an increased focus on accountability (see figure 5.10). This opposes the perceived norm as highlighted by literary discourses of red brick universities as practitioners of collegiality (see chapter 2.27b).

Moreover triangulated results (see chapter 5.3, 5.4d, 5.5a.1 and 5.5b.1) further indicate movement away from pure collegiality towards managerialistic tendencies, bureaucracy and increased focus on profitability. While it is true that there still exists a strong usage and practice of collegiality the study highlights assimilation of new ideologies and management structures in universities.

Nonetheless there has always been a keen voicing in favour of collegial ideals of autonomy and liberation together with the more inclusion and democratic means by which change or indeed discussion and discourse before change is undertaken (see chapter 5.5). Yet the rhetoric from management and administrative departments is the aim to fulfil collegial concerns (not collegiality in its totality) and prides itself on providing the best possible levels of scholarly independence (see findings in chapter 5.5b).

Furthermore the growth of management culture and techniques utilised within universities have stemmed quite strongly from changes in the dynamics and allocations of funding. The reductions in available monies required universities either to seek other external sources of funding and if not to internally budget, control and restrict spending. This has inevitably contributed to the adoption of new structures and new methodologies of management to improve cost-effectiveness and efficiency.

What is further highlighted by this research is the recognition that modern management practices are at times required. The need to ensure work within budgetary constraints goes against the traditional academic ethos but there is recognition for the need for limitations and controls set based upon institution capacities and funds. Moreover academics have recognised the growth of management culture, and while not totally embracing its

assimilation have identified areas where clearer structures and lines of authority maybe beneficial.

6.3 Management change

Management within universities has seen a reasonable shift from traditional highly autonomous institutions to ones that practises autonomy but within controlled conditions and guidelines. Indeed the vast majority of university types have seen a proliferation in management and bureaucratic rhetoric. There is strong assimilation of its practices of commercial orientation and administrative red tape within the management prerogative as universities are increasingly charged with accountability for public funds.

What is clearly indicated from the results of this study is the growing trend of undertaking corporate management ideals amidst a nagging recognition of its incompatibility with education. There are widespread calls for the introduction of measures by which to ensure university accountability to public funds and expenditure (as discussed in chapter 2.17) but similarly encouragement to continually conduct world-class research. The government sought to implement market orientation measures as a means to meet these ends. Yet the results of this research indicate a reluctance to holistically embed this approach into university management and ethos (as highlighted in chapter 5.4d and interview findings chapter 5.5a and 5.5b). Indeed the results show that while respondents identify with the need for such approaches, there is a desire for more academic precedence.

Moreover the forces affecting management change have had varied effects on the different university typologies. While newer universities are quicker and have less hesitation in embracing new corporate ideologies, there still exist an element of defensiveness and paranoia of for-profit education. Traditional older universities are less likely to embrace holistically the ethos of managerialism, bureaucracy and discipline based models (as the research findings indicate, see chapter 5.4c.2) of management but exhibit nuances of these within its operations. While it is beyond the scope of this research in identifying what best characteristics to adopt from corporate ideologies, the research can highlight the growth in assimilation of some of the practised methodologies utilised within the private sector.

Ultimately while academics and older institutions try to ‘rebel’ and hold true to intrinsic values and ethos behind HE, there exists an inclination to embark and embrace corporate techniques.

6.4 A product of changing university orientation

Changes in university structure and management paradigms have existed partly as a product of changes in university focus and objectives. Shifts towards university education to provide mass education under more commercial connotations and new customer demands create an environment for universities to become increasingly geared towards private sector ideologies. The established focus on research and learning strongly linked to university education is diluted by new needs to provide education that meets the criteria set by the marketplace and by concerns of profitability.

The research indicates a shift in university focus away from what were viewed as traditional norms of scholarly excellence towards academia within guidelines and control. While the results highlight scholarly endeavours to be embedded in institutions, there is deeper permeation of administrative scrutiny in different university types indicating a strong likelihood of its manifestation. The intrinsic academic freedoms do exist but they are no longer as free or as autonomous, partly as a product of accountability and strained funding allocations. Where management by scholar would have previously been more accommodating and exercised flexibility in administrative control and monitoring, changes in the dynamics of HE requires reformation into institutions willing and geared towards combating negative external forces. While elements of traditional paradigms exist and co-exist among new corporate and business-minded ideologies, changes in the conditions by which universities operate have warranted and perhaps pressured such adjustments in management orientation.

6.5 The rise of external forces.

The following issues build on the different external forces that affect universities examining the context of management based upon Bush's (1985; 1996; 1999; 2003) ideology of a lack of clear theoretical frameworks for the subject area. Instead the section details the different issues that affect structures with a view to identifying potential remedial actions to negative forces impacting institutional management.

6.5a The managerialistic tendencies.

The growth of managerial ideologies and techniques as a potential outlet to improve management of funds, human resources, efficiency and effectiveness to achieve targets and sought objectives is highlighted by this research. While the notion itself maybe dated (since its beginnings in the 1980s) it is clear that the issue of its assimilation and existence of its application is ever present in the minds and perceptions of university staff members. The results of this study indicate this and highlight its strong relationship to the management of universities.

Its assimilation is without doubt linked in some part to changes in funding mechanisms and amounts, which in turn required better management of available monies. The utilisation of private sector ideals provided an outlet by which universities are able to remain cost-effective while simultaneously ensuring effectiveness, efficiency and economy – the strongly prescribed 3Es as indicated by Dixon *et al.* (1998), Dopson and McNay (2000), Gordon (2003) and Trowler (1998) (see chapter 2.8). In addition to this, political forces have had a role in promoting utilisation of private and corporate sector techniques and ideologies into academic institutions.

The results of this study indicate that it is the older traditional universities (ancient and red brick) that seem to be under greater pressure to react and assimilate a market driven ethos into their operations. This increased pressure could be a product of greater change required to align structures with modern management and more managerialistic orientation. Newer universities (plate glass and new), on the other hand, inherently contain structures (or elements of) more akin to those prescribed by government and

private corporations and as such have some pre-requisite capacity and infrastructure to assimilate the new techniques (see chapter 5.4c.2, 5.4c.4 and 5.4c.5).

6.5b The political agenda.

The research has further highlighted the effects of political forces on university management. While it is foreseeable that politics play a role in university orientation, exploratory results indicate a strong allocation of power and control that the political body has on university structures. Although prescribed as distant and detached from university operations, politics manifests itself to influence and impact changes in university management, orientation and ideologies. While strongly dismissed and rejected by academics and university staff alike, the position of universities as public institutions sees it bound to the demands (covert and overt) of government agendas. Moreover the study has identified issues related to diminishing academic authority as a product of growing political interference in university operations and management. The sought alignment of university goals in tandem with prescribed measures from government is based upon notions of benchmarking performance and various quantitative indicators. While the sector as a whole is pressured either through political agenda or through politically linked funding mechanisms, older universities seem to be targeted. Notably this could emanate from traditional universities containing structures that differ more substantially against newer universities whose management more closely reflect government ideals as examined in chapter 2.26.

Ultimately the changes in government administration from Labour to Conservative Parties and back creates differing political concerns from right to left wing politics which universities have to contend with. This alongside the different political initiatives, reports and Parliamentary Acts has altered the dynamics within which universities operate. While one could argue both negatively and positively for these changes, the application of politically linked initiatives have perhaps stemmed from a need to remedy to both the perceived and genuine problems within HE management and operation.

6.5c Welfare ideologies.

The notion of education as a public good still remains as universities continue to further the current body of knowledge, disseminating research while expanding learning and understanding. This ideology has not been lost amidst the environmental changes and new demands placed upon HE. Indeed while stronger in traditional universities, all universities and their respective academics value the welfarist notion of education as a societal good. Moreover, while recognising the potential financial rewards that are linked with industry-focused research to both the institution and economy as a whole, the driving force behind academic activity lie with a keen interest and embracing of scholarly integrity.

Notwithstanding the increasing commercial and competitive demands placed upon university operations, alongside the growing of cost-effective concerns and managerialism, universities are still viewed by their members as centres of learning and research excellence. This sentiment is echoed throughout the HE sector, inclusive of administrative, academic and senior management staff groups (see chapter 5.5b). It seems clear that amidst these modern demands and recognition of the need to embrace some nuances of business ethos, there is a keen interest and will to retain focus upon scholarly activities.

6.5d Commercialisation.

Another external environmental factor identified by the research is the growth of commercial culture and market driven orientation of university activities. The proliferation of marketing of university courses and attracting of students into university is partly linked to a need to improve funding income.

This is alongside the rise in research activities leading to potential commercial income, altering the ethos of scholarly inquiry to become concerned not only with the extension of knowledge but with the financial returns of industry-linked discoveries.

The effects of commercialisation together with the application of tuition and variable top-up fees to students have created a culture of education increasingly viewed as a product. There have been new demands on universities to not only promote scholarly and research

excellence but to meet the expectations of students who are increasingly viewed as customers. Indeed the growth of commercial culture has required universities to identify and cater for its stakeholders.

Moreover the results indicate inter-relatedness between commercialisation and the need for funds (see chapter 5.5a and 5.5b). The proliferation and assimilation of commercial agenda and orientation seemingly stems from a need to diversify university funding streams in order to ensure sufficiency of monies. This is highlighted by ANOVA results on the growing view of HE as perceived as a business (see chapter 5.4c.4). Additionally this growth in commercialisation is further spurred by competition and globalisation of the HE sector where increasingly education is viewed as a commodity sold around the world. The modularisation of HE creates a rather mechanistic approach to education allowing for credit frameworks to be utilised in the global movement of students ratifying Liu and Dubinsky's (2000) and Trowler's (1998) concerns.

6.5e Funding

Undeniably funding within the sector has played a large role in the changes and dynamics within HE. The need to expand funding streams alongside continuing to ensure steady incomes and monies from existing avenues has required universities to diversify both their management practices and institutional orientation. The changes in funding mechanisms as a product of both political forces and growing competition nationally and internationally have altered the traditional structures within universities.

The tightening of budgets and available funds has required universities to conduct more financially viable research activities together with better monetary prudence. These alongside other external forces have required universities to become more 'savvy' in their allocation of funds and to become less reliant on government money.

The reduction in funding has diverted the established university ethos of education as public good towards more cost-effectiveness and financial appreciation of tightening budgets. These have altered the dynamics of university operations to becoming overly concerned with accountability in unison with increasing shrewdness of management.

6.6 Changes in traditional paradigms

The research has indicated a strong preference by many to utilise the positive aspects of collegiality and more autonomous, consultative management structures. The research has also highlighted the advantages that arise through utilisation of more current, corporate management ideologies to remedy the problematic issues existent in the internal and external environment.

Moreover there is a clear and inherent need for both scholarly empowerment and more inclusive management structures to operate with due consideration of the financial performance and 'accountability' ramifications that are extant within university operations today.

The research further recognises the deficiencies that exist within an overly collegial paradigm and model that can be restrictive and 'die-hard' in its principles and channels of operation. Nonetheless the findings suggest a keenness to ensure that elements of collegiality such as its welfarist focuses, concern for academia and academics, and ultimately autonomy, remain regardless of changing models. This indicates that there need not be a shift or return to collegiality but perhaps a model inclusive of collegiality's strongpoints.

Managerialistic ideologies do have a place in university management as they provide a viable methodology and avenue by which institutions can become more efficient and effective in their operations while satisfying accountability for public funds. The growth of commercial culture and HE within the marketplace has inevitably pressured a shift towards meeting customer demands and enterprise ideologies. Similarly these forces have required management to become more proactive and speedy in its decision-making to ensure that it subverts budget deficits and ensures financial viability.

The changes in funding mechanisms and amounts have further affected traditional management structures, requiring adoption of new ideologies or techniques that can enable not only better administration of current funds but positioning of the institution in an elevated standing by which to attain more resources. The marketisation of programmes

and courses defers from collegiality and instead embraces the managerialistic culture to operate like corporate entities.

There is without doubt a strong reluctance to emulate private organisations in universities, partly as it defers from the ethos of the professional academic, and as notions of education as product is contrasting to the socially beneficial concerns of before.

Yet the research indicates that managerialism can exist but not in totality. It seems a mixed or synergetic management structure that utilises the best from the available models would satisfy the needs of academics and management. Indeed the findings have identified the existence of pockets of collegiality amidst a university-wide managerial style.

The study further highlights a considerable coalescing or greying of traditional academic and management lines. Where stereotypical assumptions were that older universities are seen to retain strongly their preference for collegiality, and new universities tended to be quicker and had structures that much more easily embraced new management paradigms, findings here indicate that these notions can no longer apply or apply in its entirety to the sector. Traditional universities have embraced certain corporate ideals and private sector techniques (albeit as a result of external factors rather than choice) and perhaps have recognised the inevitable need to ensure financial viability. Nonetheless there has also been acceptance that better clarity and defined structures with the managerialistic paradigm can provide considerable benefits and transparency as compared to the 'boy's club' culture of collegiality.

Similarly academics within the new universities have realised and come to appreciate the more inclusive and autonomous ideals of collegial orientation. Moreover while at times there is a keen notion to remain strongly managed, there is a dilution of the management rhetoric to accept and provide more autonomy and discretion to its academics.

Notwithstanding, academics in all university groups are not only reluctant but are strongly defensive of over managed controls on scholarly activities and research excellence. While there is acceptance of increased management in financial and budgetary concerns

alongside elements of accountability, these practices should remain within the realm of administrative purview and away from academe.

There is also a shift in education as a societal and public good ideology (while strongly inherent) owing to increased prominence and focus placed upon the financial ramifications that arise from both notions of student as customer and education as product (see interview findings chapter 5.5). Is the view of education as a welfare concern deteriorating? The study identifies deep-rooted reinforcement of altruistic and welfare-based education to emanate from the different staff groups throughout the various institutional typologies. There is a strong recognition of the benefits that education and quality of education can provide to both society and the individual as a whole. Moreover its potential effect on the economy is sizeable. This view is not constrained by age of institution or length of establishment but rather by the ethos of its employees. While the need to ensure profitability and cost-effectiveness may exist as more important concerns within new universities, the benefits of quality education is an inherent conscious consideration.

6.7 Identification of prevalent structures in universities

Ultimately the research sought to identify prevalent structures or management models that existed against the different university types. The inherent complexities in age-old institutions alongside the overly structured modern corporate-gear alternatives provided a considerable quandary in identifying a structure that can appropriately reflect any university in its totality. Where ancient universities have strongly embedded themselves both physically and ideologically in the collegial stance, red brick and plate glass institutions emulate these underpinnings as principles and ethos rather than in 'bricks and mortar' fashion.

The results of this study have identified that collegial and managerial models are the perceived dominant structures that operated within UK HEIs. Yet there is also growth in bureaucratic and discipline based models. Indeed Cohen *et al.*'s (1972) garbage-can methods do exist within university structures.

While the perceived allocations of these models would be a collegial structure for traditional universities and more managerial approaches for new universities, as highlighted earlier (see chapter 6.6), these perceptions and notions are no longer as clear-cut. Although it is further foreseeable that the older ancient, red brick and plate glass universities have considerable capacity to retain (some already embedded) collegial orientation, and new universities to exhibit more so its managerial origins, the research indicates instead a dominant culture followed by substructure to exist within institutions. Potentially within individual faculties, departments and subject groups exist microcosm of different prevalent styles. The 'micro' level of management exhibits different approaches and 'the way things are done'. Indeed Birnbaum (1988: p75) recognises the existence of this as "institutions are likely to share cores values with others in their peer groups."

The research findings are indicative of this as the assimilation of managerial, bureaucratic and organised anarchy structures exist in plate glass institutions indicating the existence of a dominant and substructure (see factor analysis results chapter 5.4c.5).

Similarly new universities, while intrinsically run as bureaucratic and managerial models, portray elements of the discipline based orientation indicating the existence of a substructure. Once again this is suggestive of not only the complexities within institutions of learning, but also the existence of collegiality in every university. Although it may not reflect collegiality in its truest sense, the individuality and coming together of groups of staff exhibit 'pools' of collegiality, where individuals within the group work, react and complement the aims and objectives of the circle. This need not be concerned with learning and teaching, or administration or cost-efficiency, but rather it is the combined goals and understanding of the group that manifests some form of collegiality. Unfortunately clearer identification of its specificity is outside the purview of this research.

Therefore while collegial, bureaucratic and managerialistic structures are prominent partly as a product of embedded culture and growing government pressures respectively, there is some evidence to suggest that these may exist as the dominant model rather than all encompassing (see factor analysis results chapter 5.4c.5).

Ultimately the results indicate that it is not only the institution and its age that contributes solely to the existence of a prevalent management structure but rather as Bergquist (1992) contends, an issue of culture. Additionally individuals working and operating within these organisational premises are key constituents on which management style can exist and be supported. Whether these issues are affected by preset cultures or prevalent approaches is something for further research.

Moreover the research highlights plausible assumptions as put forth by Birnbaum (1988) on cybernetic institutions, which undertake self-correction and realignment of structures to match the needs of the university. This bolsters the findings of the research as while dominant structures exist, at departmental or faculty levels, “spontaneous corrective action” (*ibid*: p179) would enable the existence of subgroups of substructures and subcultures within a larger institutional setting, creating a symbiotic and synergetic partnership of more than one management model. The results of this study set the scene for further research on this.

6.8 Gaps satisfied by this research

Previous research has sought to uncover the different emergent issues within the external environment in which universities operate. These have examined the external forces of politics, management, funding, commercialisation and traditional ideals of university orientation and its varied effects on university management in singularity rather than holistically. While the level of detail and examination alongside a strong recognition of the inter-relatedness of these forces is profound, little previous research has amalgamated these different extant issues in their entirety.

The identification of these issues by this research alongside examination of its effects in its entirety to UK universities contributes to the current body of knowledge by collectively reviewing the potential changes and differences as a product of these forces. In reality, these forces do not affect university management in singular form but rather constantly fluctuate and have varying impact upon university management archetypes. As such examination of only *a* specified external force at any one time would not adequately reflect both the scale of the issue as well as consider the effects other forces may have in tandem.

The examination of all external forces in its entirety provides this study with a unique and perhaps more reflective view of the dynamics of university management alongside the diverse range of universities.

Moreover previous research that has embarked on its examination of prevalent external forces has dichotomised UK universities into two large groupings of traditional and new institutions, forsaking perhaps more complex and detailed findings that could have resulted in utilising a different typology.

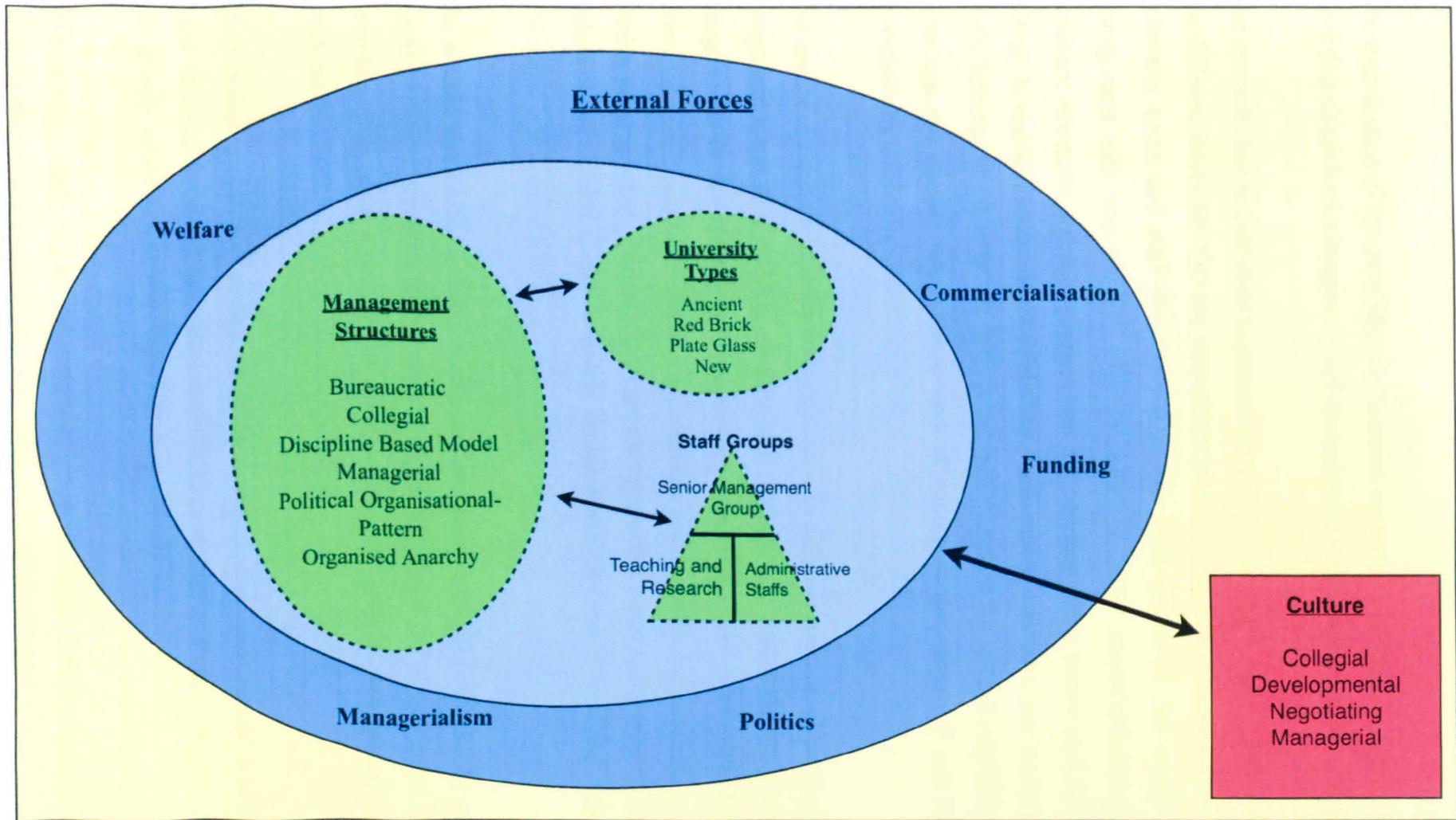
This research through examination of the various prevalent issues as highlighted by previous discourse has sought to combine these forces and examine its affects to a typology that more accurately reflects the different university groups and dynamics that exist. To assume that red brick and plate glass institutions fall under similar stratum as ancient universities fails to consider different institutional timelines, age of establishment and origins of the typology.

In addition to this, the study has also examined the various external forces against this more reflective typology and has uncovered differences in both management practices and archetypes, further identifying differences to emanate from the various staff groups. These differences can be examined through ANOVA and interview results (see chapter 5.4c.4 and 5.5b.1 respectively).

Ultimately Figure 6.1 below displays the existence of different external forces that affect university operations and orientation. It brings to the fore the notion that there exist a multitude of issues prevalent within the environment that universities and its stakeholders need to contend with and while structures exist these external forces are dynamic and ever fluctuating. The existence of culture provides an additional perspective and issue that needs to be factored into consideration.

As such the research satisfies the gap in the extant literature by examining in detail the different external forces as a whole and its effects on current and traditional management structures in UK universities. Additionally it has identified the effects of these forces utilising a more reflective typology away from previous binary assumptions.

Figure 6.1 Representative framework of different external and internal forces that affect university structure



6.9 Contributions to practice

The examination of the persisting environment forces on management approaches is an issue that affects both managers as well as academics within the university setting.

The research aims to contribute to practice through providing a holistic picture of not only the different issues but also the perceptions and attitudes that exist within the varying university types and staff demographic groups. The results of this study provides management with new and key tools by which to better understand and gauge the dominant structures and substructures that are common place within each institutional setting. It highlights that issues related to management structures and models are not solely linked to tangible ‘bricks and mortar’ manifestations but instead exist differently in subgroups and entities within the embedded culture of the individual and his or her related circles.

The results of the study provide an insight into the different opinions of the various staff groups and hierarchies enabling management, academics and administrators to not only recognise but further identify with the varying needs and values exhibited. The research allows the appreciation of the different viewpoints and obstacles faced, perhaps creating a starting point by which harmony amongst the top and the bottom can exist through better understanding. ANOVA and interview results highlight these differences (see chapter 5.4c.4 and 5.5b.1 respectively).

The contrasting results against the different university types further provide a valuable insight into varying practices, concerns and positive approaches that benefit the individual institution. This enables institutions to learn from the fallacies and successes of their counterparts.

The prevalent problems identified could be further utilised as a means to measure the extent of these forces on individual institutions providing management with important indicators by which to undertake informed decision-making.

Ultimately the study ratifies the prominent issues as highlighted by current discourse providing confirmatory and substantiated evidence to affect change.

6.10 Limitations

Whether these issues can be generalised to universities internationally is open for debate, yet similar conceptual arguments and mirroring of these forces do exist in international discourse and literature. Both developed and developing countries experience similar forces such as commercialisation, and budgetary limitations to govern and direct the way universities operate. What is similarly clear is the ability for governmental pressures, both overt and covert, to direct university orientation, which operates in a domain supposedly free from political influence.

As such while the research cannot accurately verify or claim the application of the findings and concepts argued by this study, nuances and suggestions of similarities do exist in an international perspective. Seemingly similar external forces and prevalent issues affect universities globally. Once again this research cannot accurately generalise its findings to the wider global perspective but nonetheless sets the scene for further examination of these forces on an international scale.

In addition to this, it is further pertinent to note the exploratory factorial findings in chapter 5.4c.5 of the study. While the different structural archetypes were identified against the different university groups these findings are exploratory rather than confirmatory. This sets the scene for further research to replicate and confirm the factorial findings of this research.

One of the major issues with identification of specific structures and management approaches against the diverse and differing university types that exist within the UK is the complexity by which each organisation can operate. As such while the results of this study can indicate characteristics and similarities in approaches, the findings are generalised to university types as a whole rather than the individual institution. Therefore while on a wider generic scale the results of this study resembles the institutional setting, more detailed and institution-specific examination would be required to more adequately match management methodologies.

6.11 Further research

The findings of this research while generalisable and valid could further benefit with replication against specific universities and university groups. The factorial results indicate strong associations of specific management traits and approaches to exist at specific university groups. As mentioned in the limitations of this research, these results, while reliable, are exploratory and mainly provide an insight to differing management approaches. Replication and further testing of this in future research would build on the findings of this study verifying or authenticating university-type specific management structures. Moreover the results of this research have indicated the existence of specific management structures amongst only two of the four university types within UK HE. The statistical limitations of inadequate reliability scores have discounted the results of ancient and red brick university archetypes (see factor analysis chapter 5.4c.5). Therefore the prevalent management structures on these two university groups would benefit from further research and identification.

Similarly, it would be worthwhile to apply the findings of this research to a number of specific but diverse range of institutions from the different university groups utilising perhaps case study methodologies. This would build upon the exploratory nature of archetypal findings to test its effectiveness and reliability in the setting of each individual university.

Additionally, it is likely that the external forces identified by this research affecting change in UK university management would be replicable on a global specific. While some UK specific political issues and funding techniques are unique to the UK, the thematic groupings of politics, funding, managerialism, welfare and commercialisation could be examined on a global scale. Examination of these forces at universities within other developed alongside developing nations may further provide interesting and useful identification of prevalent management models and potential indicators of these dominant forces. Comparison of these findings to identify the existence of similar forces against countries such as America and Australia, which have similarly developed economies and advanced HEIs, may lead to novel research conclusions.

Similarly examination of these issues may reveal potential suggestions for improvement and clearer causal effects of these forces. A global perspective of the issues identified by this research would examine the growth in external forces such as commercialisation, competition and management paradigms, which hold no geographical limitations.

Additionally, in line with the findings of this research, it would be worthwhile undertaking, more extensively, research interviews with a larger sample group of respondents, building upon the cultural and human element by which university management models exist and perhaps emanate from. These issues are unstructured and intangible in nature and would therefore benefit from qualitative methodological approaches, thus building upon and contributing further to the findings of this study. Detailed examination in this area may lead to novel findings on group sizes and rationale for alliances and clusters.

Chapter 7.0 Conclusions.

This chapter summates the different chapters within the research thesis and provides brief commentary on the various issues, findings, discussion and reflections undertaken through the course of study. It documents the satisfaction of the research objectives and discusses the study's contribution to knowledge, further highlighting significant areas for further research.

7.1 The research scope and its origins.

The growth of new management paradigms and other increasingly prevalent management archetypes against the traditional collegial structures were indicative of the changing face and orientation of university education today. The proliferation of commercial rhetoric alongside private and corporate management styles highlight a shift away from scholarly autonomy and learning as public good towards more profit orientated focus and regimes.

The political regimes and forces in the past few decades have further brought about changes upon the environment that universities operate within, increasing bureaucracy, quality auditing and the search for effectiveness and efficiency against growing budgetary constraints.

The introduction of managerialism and with it private sector techniques have increased the prominence placed upon management and managers diluting traditional scholarly empowerment in favour of more scrutinised management. Changes with funding amounts and dynamics within the sector have inevitably had an effect on the orientation and management of universities and its operations.

These external forces and changes within the sector have had differing effects against the diverse and complex range of university types within the UK. The contrasting histories and origins of the different university typologies of ancient, red brick, plate glass and new universities posits an interesting but varying means by which institutions react to these external forces.

This research intended to examine the different external forces that exist and affect management structures within UK universities, further seeking to examine the prevalent issues, its origins and its contrasting affects within HE.

Utilising more intricate but more accurately reflective university typology the study sought to examine these forces and its effects in shaping the management styles of educational institutions. The research further sought to identify the existence of dominant and prevalent management styles and examine movement away from traditional approaches.

7.2 Review of the literary discourses.

Chapter 2 undertook an extensive review of the literature within the area examining the different prevalent issues affecting change in the present and historically. It maps the different political regimes and its respective effects on HE and questions the growth of commercialisation and globalisation of education.

The review of the literature further highlighted the traditional dominant paradigm of collegiality and education as a societal good against the application of private sector techniques and growth of managerialism as measures to improve the 3Es. Moreover previous discourses in the area have indicated the growing effects and prevalence of external forces that change and alter the face of university education, further bringing to light the increasing focus on commercialisation and globalisation against a backdrop of political changes and diminishing funding.

The chapter further examined the different university typologies that exist within the UK highlighting the origins of the older traditional universities of ancient, red brick and plate glass institutions alongside newer universities created under an Act of Parliament. The review of the literature further examined the prevalent management structures that exist within universities.

7.3 Utilised methodologies and method.

The methodologies utilised for the purposes of this research were reflective of a

pragmatist philosophical paradigm seeking to employ all available methods by which to best accomplish the aims and objectives of the study. It highlighted the usage of both inductive and deductive paradigms seeking to build theory through qualitative research, which was subsequently tested through quantitative methods. The research utilised an exploratory qualitative research stage, followed by a quantitative questionnaire stage and ultimately concluded through a final qualitative interview phase. This methodology was built upon a survey strategy to accomplish the targeted aims of the research.

The methods of desk research, questionnaires and interviews were then examined and discussed, with both logistical and ethical considerations considered and upheld. The chapter discussed the merits upon the usage of said methods alongside the sampling methodologies undertaken to ensure both reflective and reliable findings. Ethical concerns and the relevant remedial action were also examined.

7.4 Research findings.

The findings of the research indicate differences in management styles and structures to exist within different university typologies and highlight disparities in management and orientation to lie in age of institution rather than solely on type. The binary notion of traditional and new institutions was seemingly inaccurate and unreflective of prevalent issues and management structures against the typology of ancient, red brick, plate glass and new universities. The usage of this 'extended' typology provided interesting and new insights into the different effects the different forces have on varying institutions, identifying the existence of prevalent managerialist structures to exist in plate glass and new universities. These were identified through a range of statistical analysis on questionnaire data.

The findings further examined the different perceptions and opinions of different staff groups highlighted by interview research, highlighting similarities as well as differences across the staff hierarchy. These results further reflected the major external forces identified during the exploratory phase of the study, ratifying similarities in issues and staff sentiments on the subject matter.

The findings have indicated specific managerial archetypes to be associated against specific university typologies, alongside recognition of substructures that exist within smaller subgroups and subcultures, further amalgamating the various identified external forces and identified its varying effects on various institutional types.

7.5 Discussion.

The research has indicated a strong prevalence of the 5 major external forces of commercialisation, managerialism, issues relating to funding, political forces and welfare needs, as highlighted by the literature. These forces have also been shown to have a realistic effect on university management structures and orientation altering the management models that exist. Triangulated findings identified in qualitative phase 1 indicate this (discussed in chapter 5.3). Moreover findings from phases 2 and 3 highlight similar conclusions.

The growth of these forces have inevitably altered the orientation of universities towards more managerialistic management styles and commercialised focus with movement away from traditional collegial structures. Yet these changes have affected the various university groups differently. This research has identified this disparity in focus and management as a product of age of establishment rather than type, with newer universities leaning more towards private sector ideals with older institutions weathering these forces and remaining more altruistic to the goals of education. Older ancient and red brick institutions seemingly react differently from its younger counterparts of plate glass and new universities, highlighting inconsistencies in the accustomed dichotomy of traditional and new universities.

The research has also identified a reluctance to accept the proliferation of corporate and private sector paradigms, instead valuing the importance of education as both a public and social good, beneficial to the wider society. As such while there is inevitably a shift in management structures as a product of changing external forces, there is still some amount of solidarity to traditional collegial autonomy and academic freedoms with a view of the potential altruistic benefits of education.

The study has further identified differing opinions and views of these changing management structures against the different existent staff groups. While the rhetoric of change for good emanates from upper management, teaching and research staff alongside their administrative counterparts view these changes as (at times) detrimental to education. These have been viewed to instead increase the prevalence of commercialisation within education. While there exists recognition of this growth in commercialisation and education as a product across all staff groups, there is further a cohesive focus on ensuring that education remains beneficial to society.

As such regardless of university type or staff group, there is undeniably a growth in management paradigms, the need for profitability and the growing application of private sector techniques, but there further exists a keenness to ensure that education remains intrinsically focused on learning and dissemination of new knowledge.

7.6 Conclusion and satisfaction of research objectives.

The study can therefore draw a number of conclusions that satisfies the aims and objectives set about in chapter 1. Results have highlighted the existence of prevalent external forces that impact university management. They are:

- Political forces
- Commercialisation
- Managerialism
- Funding
- Welfare ideologies

While these forces exist with the current body of knowledge, it is the amalgamated examination of these forces holistically that contributes to the current knowledge. Moreover the triangulated findings uncovered from qualitative phase 1 provide a novel starting point for both phases 2 and 3 of the study. Nonetheless the combined and triangulated findings of all three stages concur with the existence of these forces. These contribute to the current field of knowledge by extending current understanding to a more holistic interpretation of forces.

The research has also identified a change in university management away from what was traditionally viewed as commonplace orientations of collegial autonomy, scholarly freedoms, and academics managed by academics, towards more managerial and bureaucratic structures. These changes have been a product of the prevalent forces within the external environment, which universities operate.

It has also identified prominent management structures that exist within universities. In its examination the research has uncovered that new management paradigms differ strongly from traditional academic ideals and instead focuses more so on the 3Es as documented by Dixon *et al.* (1998) (see chapter 2.8). These, to some degree, have proven incompatible with academic notions of education with prominence moving away from learning towards profitability and budgetary concerns. The study further highlights difficulties and conflicting focuses placed upon economic attention against the altruistic and socially concerned ethos which education operates within. It reveals uneasiness in the application of financial concerns in totality and in absolute prominence.

This has satisfied objectives 1 and 2 of the study through examining the existence of varying university structures and management change alongside identification of the current external forces that have been a catalyst to these changes. Moreover both the identification and development of a representative framework of these forces alongside a review of its effects on university management structures satisfies the goals set by objective 3. Figure 6.1 highlights this representative framework of forces.

The research has also identified a number of prevalent structures to exist within different university types. Plate glass and new universities exhibit strong managerialistic tendencies, while ancient and red brick institutions seemingly retain some form of collegial or scholarly and research orientated structure. The research posits that differences in management structures and university orientation exists out of age of establishment rather than solely on typologies. As such universities that are older or have existed for longer hold truer to collegiality as opposed to younger universities, which increasingly accept some form of managerial orientation. This is portrayed by the results of this study indicating similarity in approaches by ancient and red brick institutions against the younger plate glass and new universities (see chapter 5.4c.2, 5.4c.4 and 5.4c.5

and 6.5a). To some degree the previous dichotomy of traditional and new universities fails to consider the existence of these prevalent issues against this typology.

While the research has highlighted the existence of these prevalent structures, it has also identified the possibility of dominant and substructures and cultures within universities. As such while a dominant managerial structure may exist and emanate from upper management or the seniority, there exists subsets or substructures within departments, faculties or staff groups. Seemingly universities can and do contain a range of management structures which can differ against the institution as a whole, existent in smaller segmentation of individuals, subject expertise or even faculties and departments.

Moreover the research has also considered Bergquist's (1992) and Birnbaum's (1988) notion of the cultural context that exists within management structures, indicating that the culture of an institution, faculty, department or group plays a key role in the assimilated management style. As such while it is true that prevalent management structures can be linked to particular institutions the dominance of these structures are further reflective of the culture within these universities, indicating a "range of possible behaviours within which the organisation usually functions" (Birnbaum, 1988: p73) (highlighted in chapter 2.4). The existence of substructures is further indicative of the cultural context within institutions highlighting both a 'bricks and mortar' effect on university management alongside a 'people' perspective, with individuals themselves embracing or negating dominant management styles.

Though identification of the prevalent management structures against the varying typologies of universities within the UK, as a product of prominent external forces, the research has satisfied the goals as set by objective 4. It has identified (albeit in an exploratory rather than conclusive manner) certain university typologies to exhibit specific management structures and traits. Consequently the study has further extended the set objectives and uncovered novel findings that shed new light into the changing and existent management structures within institutions, indicating both the existence of substructures and a cultural perspective, contributing to and extending the current body of knowledge in the area.

7.7 Limitations of the research.

While the results of this research allow valid conclusions to be drawn, there exist certain limitations to its application in full. The results have highlighted a number of prevalent management structures that exist within different university types, but are limited in its exploratory rather than conclusive nature. As such, the findings, while statistically reliable and triangulated require further research to 'test' and examine further its validity and accuracy within a singular institution or institutional context.

As highlighted above while the findings provide an insight into potential managerial archetypes in place at specific universities types, the results are applicable to the larger university groupings of ancient, red brick, plate glass and new as opposed to individual institutions and require further research. The exploratory nature of these findings restricts conclusively assigning a particular archetype to an institution.

Chapter 6.10 discusses this in more detail.

7.8 Scope for further research

As highlighted in the limitations of this study, further research could be undertaken to verify the findings of this research, confirming or disproving the existence of prevalent management structures within the university typologies.

Moreover utilising similar methodological instruments, the issues highlighted by this research could be applied within a global context, examining the forces in countries with either a developed or developing education system.

In addition to this, as the findings suggest a cultural perspective to university management and the existence of dominant and substructures, utilising qualitative methodologies in further research would provide an interesting viewpoint to the conclusions drawn from this research. As qualitative methodologies provide deeper and better understanding of issues, its application in further research would benefit the examination of intangible and loose cultural connotations and effects.

Moreover further research examining the size of these substructural groups would provide interesting insight and identification of these clusters and their respective segmentation against perhaps certain staff groups, departments or faculties.

7.9 Contribution to Knowledge

The research has sought to amalgamate the different prevalent external forces and examine its effect on university management. This extends the current body of knowledge examining these forces in totality as opposed to investigating the issues of politics, funding, managerialism, commercialisation and welfarist concerns in exclusivity.

The research has also identified the existence of prevalent management structures in universities and provided an up-to-date review of the changing orientation and assimilation of corporate ideals into university orientation. It has further uncovered the existence of substructures and subcultures both extending and ratifying Bergquist's (1992) and Birnbaum's (1988) research on cultural permutations within university management.

The study further contributes to knowledge by positing the need for a more reflective examination of university typology as opposed to the established dichotomy of traditional and new universities. The findings of this research has identified differences in practices to exist against the varying age of establishment of these institutions, thereby indicating that traditional binary views of university groupings are unreflective of the complexity within UK institutions.

In addition to this, the findings of this research would provide valuable insight and contributions to management practice enabling empowered individuals to better ascertain the different forces at work. Moreover the research provides valuable tools to gauge the dominant structure within institutions and the prevalent substructures alongside the differing opinions of the various staff groups. This would enable informed choices and decisions to be made with due consideration of the varying issues from the viewpoint of the different staff members within a university hierarchy.

Ultimately the study has provided an up-to-date examination of the different external forces that have altered management structures within the varying university typologies and staff groups. It hopes both to contribute to a better appreciation of the different forces at work within the UK university sector and seeks to affect change in management's understanding of different existent structures.

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