

<http://researchspace.auckland.ac.nz>

ResearchSpace@Auckland

Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right to be identified as the author of this thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from their thesis.

To request permissions please use the Feedback form on our webpage.

<http://researchspace.auckland.ac.nz/feedback>

General copyright and disclaimer

In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the [Library Thesis Consent Form](#) and [Deposit Licence](#).

Orienting Human Resource Management to Serve University Commercialisation

Jennifer Hui-Han Gao

**A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Management
The University of Auckland, 2014**

ABSTRACT

The contribution of human resource management (HRM) to organisational performance is confirmed, yet there remains the challenge to understand how the configuration of HR practices leads to organisational outcomes. The objective of this research is to examine university commercialisation strategies and the HRM configurations that serve these strategies. Adopting the resource-based view and the notion of HR architecture, this thesis investigates how university commercialisation organisations (UCOs) create and shape a climate for commercialisation through human resource policies and practices, and how the employees perceive and appraise such climate.

This qualitative study examined three UCOs in New Zealand and Australia and undertook 85 semi-structured interviews with UCO staff members at the executive level (strategic), middle management level (implementation) and employee level. The findings identified three different UCO strategic models: “service-provider”, “relationship-builder” and “money-maker”. Corresponding to these different strategic models, each UCO has a different climate that it wants to achieve through its HRM, which subsequently translates into different configurations of HR policies and practices. Nevertheless, despite these discernible differences, a generic HRM model still tends to dominate across the three UCOs due to industry-specific needs and challenges. This research also identified resource availability and organisational history and stability as factors that affect UCOs’ HR strategy and implementation, which in turn determine employees’ perception of HRM.

Taken together, this research contributes to the field of HRM by empirically testing and providing insight into the association between organisational strategy, HR program configurations and employee appraisal. The identification of different university commercialisation strategies, factors that influence the effectiveness of UCO strategy and HR practices that can enhance employee perceptions also has practical implications for future university research commercialisation activities.

ACKNOWLEDGEMENTS

First and foremost, I would like to express my deepest gratitude to my supervisors Professor Nigel Haworth and Associate Professor Natasha Hamilton-Hart. Nigel's recommendations and feedback have always been a great source of inspiration and encouragement, and Natasha's consistent support and insightful comments are invaluable advice that guided this thesis.

My special thanks go to the CEOs/ Acting CEO/ Deputy CEO of the university commercialisation organisations, who opened doors for me so I could access these organisations and reach my data collection targets. Also to all participants of this study, who gave of their time from their busy schedules to take part in interviews. This thesis would not have been possible without their kind support, and I thank each of these people for their generosity.

I gratefully acknowledge and thank University of Auckland Business School, in particular the Department of Management and International Business, for their financial support in the form of a Graduate Teaching Assistant contract. Being able to take on a teaching role has also greatly enriched my journey towards a PhD.

Grateful thanks go to Professor Peter Boxall, who provided comments and helpful feedback on Chapter 2, and shared his wealth of knowledge in the field of strategic human resources management.

Last, but by no means the least, I would like to thank my parents and brother for their unconditional love, support, and persistent faith in me.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	v
LIST OF ABBREVIATIONS	viii
LIST OF TABLES.....	ix
LIST OF FIGURES.....	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1. Research Background and Theoretical Relevance	1
1.2. University and Industry Context for Commercialisation	3
1.3. Research Purpose and Questions	6
1.4. Thesis Structure	7
CHAPTER TWO: LITERATURE REVIEW	9
2.1. Relevance of the Resource-Based View to HRM	9
2.2. HR Architectures	11
2.2.1. HR Architecture ‘Ideal Types’	11
2.2.2. HR Programs	14
2.2.3. Employees’ Perception of HRM.....	17
2.2.4. Configurations of HR Architecture ‘Ideal Types’	20
2.3. HR Decisions and Contextual Complexity.....	22
2.4. UCO Strategy and HRM in UCOs: Significance and Implications	24
2.5. Research Model and Operationalisation of Variables	26
2.6. Chapter summary.....	29
CHAPTER THREE: RESEARCH METHOD.....	30
3.1. Research Paradigm	30
3.2. Research Strategy	31
3.3. Sample and Accessibility	32
3.4. Data Collection	34
3.5. Data Analysis.....	39
3.6. Validity	41
3.7. Ethical Issues	44

3.8.	Chapter Summary	44
CHAPTER FOUR: UCO ONE “THE SERVICE-PROVIDER”		46
4.1.	Organisational History and Structure	46
4.2.	From commercialisation strategy to HR strategy	48
4.2.1.	Organisational strategy	48
4.2.2.	Key organisational challenges	49
4.2.3.	Human Resource Strategy	50
4.3.	HR architecture and efficacy	54
4.3.1.	Knowledge, skills and abilities domain.....	54
4.3.2.	Motivation and effort domain.....	62
4.3.3.	Opportunities to contribute domain.....	73
4.4.	Employee perceptions as HR outcome.....	77
4.4.1.	Employee appraisal.....	77
4.5.	Chapter summary.....	78
CHAPTER FIVE: UCO TWO “THE RELATIONSHIP-BUILDER”		81
5.1.	Organisational History and Structure	81
5.2.	From commercialisation strategy to HR strategy	85
5.2.1.	Organisational strategy	85
5.2.2.	Key organisational challenges	86
5.2.3.	Human Resource Strategy	87
5.3.	HR architecture and efficacy	92
5.3.1.	Knowledge, skills and abilities domain.....	92
5.3.2.	Motivation and effort domain.....	98
5.3.3.	Opportunities to contribute domain.....	105
5.4.	Employee perceptions as HR outcome.....	109
5.4.1.	Employee appraisal.....	109
5.5.	Chapter summary.....	110
CHAPTER SIX: UCO THREE “THE MONEY-MAKER”		113
6.1.	Organisational History and Structure	113
6.2.	From commercialisation strategy to HR strategy	116
6.2.1.	Organisational strategy	116
6.2.2.	Key organisational challenges	118

6.2.3.	Human Resource Strategy	120
6.3.	HR architecture and efficacy	125
6.3.1.	Knowledge, skills and abilities domain	125
6.3.2.	Motivation and effort domain	135
6.3.3.	Opportunities to contribute domain	144
6.4.	Employee perceptions as HR outcome	147
6.4.1.	Employee appraisal	147
6.5.	Chapter summary	148
CHAPTER SEVEN: CROSS-CASE ANALYSIS		151
7.1.	HRM in UCOs: The Resource-Based View	151
7.2.	Organisational Strategy	152
7.3.	HR Strategy and HR programs	162
7.4.	HR Architecture and Employee Perception	174
7.5.	Theoretical model	181
7.6.	Chapter summary	183
CHAPTER EIGHT: DISCUSSION AND CONCLUSIONS.....		185
8.1.	Highlights of Research Findings	185
8.2.	Discussion.....	191
8.3.	Contribution and Limitations	196
8.4.	Future Research	200
APPENDIX I: INTERVIEW QUESTIONS		201
REFERENCES		205

LIST OF ABBREVIATIONS

BD	Business Development
BDM	Business Development Manager
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
DVCR	Deputy Vice-Chancellor (Research)
ER	Employment Relations
GM	General Manager
HR	Human Resources
HRM	Human Resources Management
IP	Intellectual Property
KPI	Key Performance Indicators
MBA	Master of Business Administration
NZ	New Zealand
ODM	Organisational Development Manager
OECD	Organisation for Economic Co-operation and Development
OH&S	Organisational Health and Safety
PD	Performance Development
PI	Principal Investigator
R&D	Research and Development
RBV	Resource-Based View
SHRM	Strategic Human Resources Management
SMT	Senior Management Team
UCO	University Commercialisation Organisation

LIST OF TABLES

Table 2.1: HR architecture configurations: second-order factors, based on Ridder et al. (2012)	20
Table 3.1: Criteria to ensure quality for qualitative research	43
Table 3.2: Criteria and actions to address ethical issues	45
Table 4.1: Summary table for UCO One	80
Table 5.1: Summary table for UCO Two	112
Table 6.1: Summary table for UCO Three	150
Table 7.1: UCO strategies and characteristics	158
Table 7.2: UCO environmental contexts	160
Table 7.3: HR program sophistication for each UCO	172
Table 7.4: HR practices and employee appraisal for each UCO	178
Table 7.5: HR architecture matching based on HR programs and practices	179

LIST OF FIGURES

Figure 2.1: HR architecture ‘ideal types’ as presented by Ridder et al. (2012)	12
Figure 2.2: The HR Contingency Framework	23
Figure 2.3: Conceptual research model	27
Figure 4.1: Organisation chart for UCO One	47
Figure 5.1: Organisation chart for UCO Two	83
Figure 6.1: Organisation chart for UCO Three	114
Figure 7.1: The three models of university commercialisation organisations	152
Figure 7.2: Main determinants of UCO strategy	161
Figure 7.3: Main determinants of UCO effectiveness	161
Figure 7.4: Mapping of three UCO cases/ models by HR architecture	180
Figure 7.5a: Original conceptual research model	182
Figure 7.5b: Orientation of HRM to serve UCO strategies	182
Figure 7.6: Theoretical mapping of strategies and HRM in the three UCOS	184

CHAPTER ONE: INTRODUCTION

Human resource management (HRM) is a fundamental activity in starting and expanding an organisation. Regardless of the variations in approaches, ideologies, and resources involved, HRM is essential and is closely tied to an organisation's strategic business plan and development (Boxall, Purcell, & Wright, 2008; Compton, Morrissey, & Nankervis, 2006). With the growth of interest in strategic management in the 1980s, discussions of strategic human resource management (SHRM) emerged and sought to integrate HRM into organisational strategic management processes. Research in SHRM focuses on how decisions about a firm's HR practices are determined, how required behaviours are specified, how such behaviour links to firm-level outcomes and how well these HR decisions match organisational strategies or competitive situations (Wright & McMahan, 1992). This research seeks to examine how university commercialisation organisations (UCOs) create and shape a climate for commercialisation through human resource policies and practices, and how the employees perceive and appraise such climates.

This chapter begins by first introducing the background to this research as well as its theoretical relevance. The next section then provides a picture of the industry context for university commercialisation. The third section states the research purpose and main research questions. The final section outlines the structure of this thesis.

1.1. Research Background and Theoretical Relevance

This research contributes to the understanding of the processes that link HRM to employee perceptions and it responds to the call for investigations of HRM in UCOs (Rothaermel, Agung, & Jiang, 2007; Yusof & Jain, 2010). Taking an analytical approach to HRM, there remains a challenge to understand how HR practices work or lead to organisational outcomes (Boxall et al., 2008). Although the contribution of HRM practices to organisational performance is confirmed (Delaney & Huselid, 1996; Huselid, 1995; Huselid, Jackson, & Schuler, 1997), less is known about the process that links HR policies to the desired organisational outcomes, and this issue is commonly referred to as the "black-box" problem (Boxall & Purcell, 2011). Research highlights the importance of the configurations of various HR activities when explaining how HRM associates with organisational performance (Huselid, 1995). This motivates this thesis to study the HR

architecture in different UCOs and test for the key steps and processes through which HRM affects employee attitudes and perceptions, which are critical to employee behaviour and organisational performance. In this thesis, the notion of HR architecture represents a combination of a firm's HR programs and practices and helps to examine the internal consistency and coherence of an organisation's HR system (Arthur & Boyles, 2007; Becker & Gerhart, 1996; Lepak & Snell, 1999, 2002; Ridder, Baluch, & Piening, 2012).

The significance of this research is that it provides further insight into the process by which HRM guides employees to achieve the organisation's desired strategic goal and how the perceptions of these principal actors shape this process. These processes are examined in relation to their internal and external contexts, which enables better understanding of the links between an organisation's environment, its strategy and HR design. According to Becker & Gerhart (1996), insights into such processes are needed to understand how HRM creates value for the firm. In addition, it is necessary to investigate and discover different processes through which HR practices are translated into desired outcomes in different contexts. This in turn allows the building or refinement of typologies (Lepak, Liao, Chung, & Harden, 2006). Subsequently, such typologies may reduce the apparent disconnection between prescriptions generated by large-scale academic studies and the actual practice observed in firms. This research also responds to calls for qualitative studies that can examine the critical links which align the HR system with overall strategy and translate HR policies and practices into desired organisational outcomes (Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009; Lepak et al., 2006).

Although this research is aware of a number of adjacent research streams in the areas of university entrepreneurship and technology transfer, it excludes these literatures as they do not contribute to the approach adopted here. Existing university technology transfer literature streams mainly focus on: 1) the entrepreneurial university (Etzkowitz, 2003; Friedman & Silberman, 2003); 2) productivity of technology transfer offices (Jensen, Thursby, & Thursby, 2003; Markman, Gianiodis, Phan, & Balkin, 2005); 3) creation of new university spin-outs (Clarysse, Wright, Lockett, Van de Velde, & Vohora, 2005; O'Shea, Allen, Chevalier, & Roche, 2005); and 4) innovation networks or business incubators (Lee & Osteryoung, 2004; Lindelof & Lofsten, 2003), which are beyond the scope of this research. Most of the research in these streams assumes or focuses on quantitative measurements of UCO success (Chapple, Lockett, & Wright, 2005; Siegel, Waldman, & Link, 2003). Although this research fills in a 'gap' in the broad

entrepreneurial university research field by selecting UCOs as its research context and investigates HRM in this particular setting, the main theoretical focus of this research is on HRM and it does not directly contribute to or derive from any of the four academic discussion streams outlined above.

1.2. University and Industry Context for Commercialisation

This research focuses on the New Zealand and Australian contexts in particular. Similar to many other nations around the world, the governments and policies in both countries began to focus on innovation in the 1980s (Cutler Report, 2008; Engelbrecht & Darrogh, 1999). In terms of the context of innovation and commercialisation, New Zealand and Australia share many similarities. Both New Zealand and Australia have implemented substantial packages of 'liberalising' policy reforms over the past two decades, designed in large part to raise productivity performance and living standards (Parham & Roberts, 2004). One key intermediate objective of the reform programs in both countries has been to open the economy up to greater trade and investment (Parham & Roberts, 2004). Both countries perceive research capacity, private sector R&D expenditures and the gap between science-industry/public-private transfer as challenges (Fairweather, Wintjes, Williams, Rinne, & Nauwelaers, 2010). In addition, both countries share a weakness in low levels of investment in business sector R&D, and fragmented government support and policy action in relation to R&D (Cutler Report, 2008; OECD, 2007). Both New Zealand and Australia are also lagging behind other developed countries in terms of innovation and technology transfer (Barlow, 2006; OECD, 2007).

On the other hand, there is still a number of differences between the two countries' commercialisation contexts. First, New Zealand places slightly more focus on a science and technology push (i.e. more input from researchers rather than industry users) and its determining priorities, while Australia places more emphasis on demand pull (i.e. more input from industry and other users) and setting clear directions (Martin & Johnston, 1999). Second, although both countries are successfully adopting and adapting overseas experiences, Australia is better at involving its stakeholders in its innovation systems (Harman & Harman, 2004). Third, New Zealand's superannuation arrangements are different from those in Australia, where compulsory contributions to superannuation have contributed to a stronger capital market and a greater flow of investment funds into the share market. This has given companies launched on Australia's stock exchange an

advantage over their New Zealand counterparts and attracted some New Zealand technology-based companies to list in Australia (OECD, 2007). Fourth, regarding public support to R&D, New Zealand continues to rely on direct funding; it does not use tax incentives, although the introduction of a tax credit is under discussion. In Australia, financial support via tax incentives is greater than that via direct funding (OECD, 2007).

Overall, the national innovation and commercialisation environment for New Zealand and Australia shows a strong similarity, but with minor differences. In general, it appears that New Zealand's national commercialisation and R&D environment is less effective than that in Australia. One might predict that, as there is less government and financial support for the UCO in New Zealand, it will need to place more emphasis on pursuing financial profit (e.g. through licensing) and cutting costs as much as possible. On the other hand, UCOs in Australia may focus more on building long term relationships (e.g. research collaboration and joint-ventures) as opposed to gaining short term profit. These differences in organisational strategies and objectives may in turn be reflected in the UCOs' HR strategies and systems.

University Commercialisation Offices

The role of the university has undergone significant transformation and evolution over the last two decades (Clark, 1998; Gunasekara, 2006). Traditionally, universities had two core functions: the pursuit of knowledge (or "pure" academic disciplines) and the creation of an educated elite (Denman, 2005). However, university-industry links started to strengthen in the 1980s and the role of the university in relation to the nation and market has become a key focus (Harloe & Perry, 2004). Universities are now shifting away from relatively high levels of autonomy, and are orientating towards a new form of knowledge production, in which the engagement and cooperation of universities with businesses and the government has become part of their role (Tornatzky, Waugaman, & Gray, 2002).

Dorf & Worthington (1990, p. 252) define technology commercialisation as "the process of moving research results from a research environment to a successfully marketable product". University research commercialisation entails commercial applications of university research and technological output (Friedman & Silberman, 2003). Commercialisation offices are organisations that engage in activities that aim to transfer academic research output into commercial use. They are often wholly-owned subsidiaries of the universities they serve. Existing literature identifies the typical activities of commercialisation offices

as: identification and marketing of IP, organising research joint ventures, patenting and licensing IP and organising spin-off companies (Phan & Siegel, 2006; Siegel, Waldman, Atwater, & Link, 2003). Commercialisation offices often hold a dual agent role as they may be a research commercialisation agent for both faculties and the university's central administration (Jensen et al., 2003).

This research examines HRM in the UCO setting as these organisations provide a relatively new context and organisational form in which human resource is a significant predictor of their performance (O'Shea et al., 2005; Ustundag, Ugurlu, & Kilinc, 2011). UCOs are established to meet the growing desire to transfer research output developed within universities. These organisations play the important role of managing academia-industry connections, which, in turn, determines to a large extent the manner in which university research benefits the economy. While having attracted considerable academic interest, literature on the organisational performance of commercialisation offices is inchoate and scattered, and little attention has been paid to the management of UCOs (Geuna & Muscio, 2009; Rothaermel et al., 2007). There is also a notable lack of studies looking at how well (or not) commercialisation offices are recruiting, training and retaining their employees (Rothaermel et al., 2007). According to Boxall (2003), HR advantages may exist when a firm's competitive strategy values relevant quality and knowledge. UCOs provide consulting services for both academics and business partners and also act as the bridge between the two sectors which are traditionally very dissimilar. UCOs place strong emphasis on business communication skills, legal and scientific expertise, as performance of these organisations is highly dependent upon the ability, motivation and behaviour of the employees (or technology transfer managers). In this sense, HRM practices in UCOs are extremely important and may have different challenges compared to HRM practices in other firms in the service sector. For example, UCOs need to attract and develop staff members who have a rare combination of skillset and qualifications (both commercial and technical knowledge), and higher levels of diversity in employees' background make it more difficult for the UCO to identify a single set of incentives that motivates all employees. Initial research shows that while the purpose of all UCOs is to act as a commercial intermediary between the university and its industry and government partners, there are still significant differences between the strategies they adopt and the types of organisational goals they set. Therefore this research also examines how different UCO strategies translate into different HR strategies.

In addition, this research has chosen to focus specifically on the Australasian context as currently both New Zealand and Australian governments are actively promoting further technology and knowledge transfer collaborations between the two countries. Trans-Tasman arrangements such as Knowledge Commercialisation Australasia and the Trans-Tasman Commercialisation Fund in support of collaboration between universities in New Zealand and South Eastern Australia are examples of such partnerships (Knowledge Commercialisation Australasia, n.d.; Trans-Tasman Commercialisation Fund, n.d.). Therefore, it is interesting to examine the particular setting of UCOs in these two countries. This research is also significant for practical reasons. It is likely that HRM in university commercialisation organisations will become increasingly important in the future. Commercialisation of university research output and technology transfer from academic institutions to the private sector is growing and bears important implications for the growth of regional and national economies (Australian Centre for Innovation, 2002; Thursby & Thursby, 2002). Many university commercialisation entities now exist and are developing, some as a department in the university and some as wholly-owned subsidiaries of universities. This research may inform universities and their commercialisation offices of the characteristics of effective and ineffective practices that can help to improve their HR systems and commercialisation performance.

1.3. Research Purpose and Questions

The main research purpose of this thesis is to investigate how HRM configurations serve UCO strategies. This research aims to examine the translation of organisational strategy into HR practices in the particular setting of UCOs. In order to achieve this purpose, it is necessary to examine various organisational aspects including company strategy, HR strategy, HR practices and employee appraisal. Therefore, three key research questions derive from this main research objective:

- 1) How do different UCO strategies inform HR strategy and intended organisational climate?
- 2) What HR architectures are in place and to what extent do the HR architectures create the intended climate?
- 3) How effective are the HR programs and practices in delivering the intended outcomes in the form of employee perceptions and appraisals?

In order to achieve the research objective and answer the research questions, this thesis adopts a multiple case studies research strategy by examining three UCOs in Australia and New Zealand. The three research questions form the basis of data collection and analyses for the three cases.

As the focus of this research is on how UCOs configure their HR architecture to organisational strategy and whether the HR architecture is successful at delivering the intended message (climate), it only examines how employees perceive HR practices, and it does not examine the relationship between employees' perceptions, their work behaviour and organisational performance.

General research outcomes are presented here to facilitate the reading of this thesis. The findings identified three different university commercialisation strategic models: "service-provider", "relationship-builder" and "money-maker". Corresponding to these different strategies, each UCO has a different climate that it wants to shape or achieve through its HRM, which subsequently translates into company-specific configurations of HR policies and practices. Nevertheless, despite these discernible differences, a generic HRM model still tends to dominate and there are also similar HR goals shared by the three UCOs due to industry-specific needs and challenges.

1.4. Thesis Structure

As each of the three UCO cases has its own distinct commercialisation strategy and HR configurations that correspond to the strategy, this thesis presents these case studies separately as individual "stories". This thesis is structured as followed:

Chapter One introduces the background of this research and outlines the purpose, significance and structure of the thesis.

Chapter Two presents and discusses the theoretical models and frameworks used. These include the resource-based view of the firm, components of the HR system, contextual complexity, and four HR architectures as 'ideal types' that can be applied to the UCO context. Based on the literature reviewed, Chapter Two presents the conceptual research model and outlines the operationalisation of variables.

Chapter Three justifies the research design by discussing methodological underpinnings and research strategy. This chapter also outlines data collection and analysis methods.

Chapters Four to Six present within-case results for UCO One, UCO Two and UCO Three respectively. Each chapter includes sections that correspond to the three research questions: linkages between organisational strategy and HR strategy; HR architecture and efficacy; and employee perceptions of HRM.

Chapter Seven makes cross-case comparisons, identifying and discussing similarities and differences between the three UCOs' company strategies, HR strategies and implementation, and HR architecture and employee appraisal. This chapter also presents a refined model for HRM in UCOs based on the original conceptual research model.

Chapter Eight concludes this thesis by presenting highlights of the research findings and future research directions. It also includes the contribution and limitations of this research.

CHAPTER TWO: LITERATURE REVIEW

HRM as an academic field of theory and research started attracting major academic attention in the 1980s, yet the lack of interaction between strategic researchers and HRM researchers left the SHRM literature disjointed and fragmented (Lengnick-Hall et al., 2009). However, the contribution of Wright and McMahan (1992) shifted the direction of SHRM research from focusing on HRM as activities that manage people, to focusing on HRM as creating strategic contributions. Wright and McMahan (1992) also identified six theoretical constructs of SHRM, including the behavioural perspective, agency and transaction cost theory, the resource-based view, cybernetic models, power/ resource dependence models, and institutional theory, which led to more attention being paid to the theoretical foundations of SHRM research.

In the field of SHRM, there remains the challenge to find out how and why HRM patterns evolve and develop in specific contexts, and how these patterns lead to significant stakeholder outcomes (Boxall, Ang, & Bartram, 2011; Boxall et al., 2008). While there are competing theoretical models of SHRM, the resource-based view provides a strong argument that explains how HR systems contribute to an organisation's sustained competitive advantage or vulnerability, depending on the characteristics and configuration of these systems. Therefore, as the main purpose of this research is to find out how UCOs design and execute their HRM in response to their respective commercialisation strategy, this thesis adopts the resource-based perspective, which is now one of the dominant theoretical paradigms in SHRM research (Lengnick-Hall et al., 2009).

2.1. Relevance of the Resource-Based View to HRM

From the resource-based view (RBV) of the firm, sustained competitive advantage allows a firm to perform better than its competitors and, in order for HRM to become sustained competitive advantage for the firm, four conditions need to be met (Barney, 1991; Wright & McMahan, 1992). First, the firm must have a heterogeneous demand for labour, so that HRM can provide value for the firm. Second, the firm's HRM must be rare among its competitors. Third, the firm's unique HR configuration must be inimitable. Finally, there cannot be substitutes for the firm's particular HR practices. Colbert (2004, p. 341) perceived SHRM as a "complex, living-systems extension" of the RBV and argues that an organisation's human talents are of critical strategic importance and they are instrumental

in developing the strategic capability of its pool of HR. The key purpose for HRM, in this sense, is to achieve a fit with the organisation's broader business strategy and context and aim to achieve internal consistency (Baird & Meshoulam, 1988; Beer, Spector, Lawrence, Quinn Mills, & Walton, 1984; Collis & Hussey, 2003; Wright & Snell, 1998). Two constructs are central to the examination of HRM in organisations: HR strategy and the HR system (Boxall et al., 2011).

2.1.1. HR Strategy and System: Serving Managerial Intentions

When examining an organisation's HRM, it is important to distinguish between the HR strategy, which entails HR goal-setting and decision-making at the strategic or managerial level, and the HR system, which represents the policies and practices that are actually implemented. According to Dyer (1984), HR strategy represents the pattern of decisions made about an organisation's HRM, especially in relation to managerial goals and the ways by which these goals will be pursued. In other words, HR strategy reflects the way through which a firm aligns the contribution and role of its HR activities to its strategic objectives. In order to be considered a HR strategy, a firm's HR approach should affect its relative performance, should be formulated by the firm's management team rather than HR specialists alone, should consist of important objectives and means for the firm's overall work organisation and employee management, and should inevitably influence the firm's survival and success (Boxall & Purcell, 2011). HR strategy can correspond to a mix of HR systems that overlap each other within an organisation (Boxall & Purcell, 2011).

At the implementation level, the construct of the HR system emphasises the need to consider HRM as a set of practices rather than individual activities when examining its link with organisational performance (Barney & Wright, 1997; Bowen & Ostroff, 2004; Huselid, 1995; Jiang et al., 2009). Such systems encompass the types of work an organisation involves and the practices that are employed to organise the people doing this work (Boxall & Purcell, 2011). Dyer and Reeves (1995) argue that we should consider configurations of multiple HR practices rather than focusing only on single activities. It is important for firms to create a HR system that consists of a bundle of different HR practices with synergistic effect, as any individual effective practice can be easily imitated, whereas a system with interrelated components that align with the company's contexts and strategies makes imitation more difficult (Barney & Wright, 1997; Huselid, 1995; MacDuffie, 1995; Wright & Snell, 1991).

In order to achieve strategic goals, organisations have to ensure both vertical fit between its bundle of HRM practices and competitive strategy, and horizontal (or internal) fit among individual activities within a HR system (Bowen & Ostroff, 2004; Kepes & Delery, 2008). Although both are important concepts in the literature, vertical fit and horizontal fit remain inadequately theorised and examined to date (Boxall et al., 2011; Lengnick-Hall et al., 2009). A system of HR practices has the potential for complementarities that can form sources of sustained competitiveness and enhance the firm's competitiveness (Baird & Meshoulam, 1988; Huselid, 1995), yet there may be tension among different HR sub-functions within a given HR system (Jiang et al., 2009). In general, the more congruence between each component within a particular strategy, the more effective the strategy will be (Wright & Snell, 1991).

Based on these concepts, this research seeks to identify the UCOs' HR strategy and the managerial intentions underlying such strategy. It also aims to examine how the UCOs have designed their HR systems in line with HR strategy and the extent to which these HR bundles form complementarities.

2.2. HR Architectures

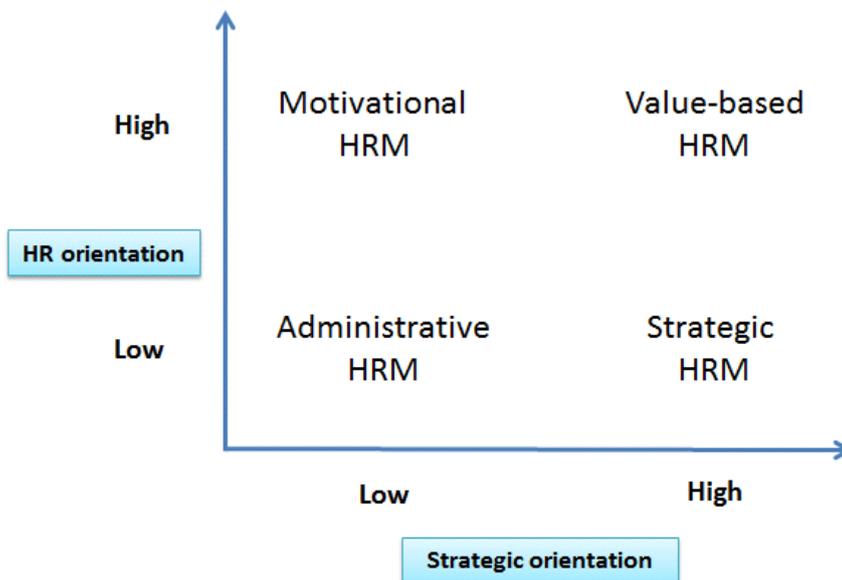
The notion of HR architecture acknowledges the fact that a single organisation can have multiple HR systems (Lepak & Snell, 1999, 2002; Tsui, Pearce, Porter, & Tripoli, 1997). Therefore, HR architecture represents all employment-related subsystems that exist within organisations, because rather than having one single HR system, organisations often apply a mix of HR systems across different jobs or employee groups (Kalleberg, Marsden, Reynolds, & Knoke, 2006; Lepak & Snell, 1999; Lepak, Takeuchi, & Snell, 2003). This research makes use of the idea of 'HR architecture' to examine HRM configurations in the three selected cases, and the 'HR architecture' notion in this research includes two main components: HR programs and employee perception. Each component has three second-order dimensions, which are outlined in the following two sections.

2.2.1. HR Architecture 'Ideal Types'

A recent contribution by Ridder et al (2012) presents a developed HR architecture model, which this research finds helpful in its research approach. Although Ridder et al (2012) constructed their model for non-profit organisations, this research finds that it is also applicable to other contexts. Therefore, this thesis draws on Ridder et al's (2012)

conceptual paper as a signpost and organising approach to route its HR theoretical direction in examining the particular HR setting of UCOs. Figure 2.1 illustrates Ridder et al's (2012) model and displays the four 'ideal' architecture types along two first-order dimensions: organisational HR orientation (the organisation's emphasis on HR) and organisational strategic orientation (the organisation's emphasis on strategy). Drawing on Ridder et al's (2012) definition, the notion of 'ideal types' in this research represents a particular configuration of organisational HRM attributes and is used as a reference point for comparing organisational practices and employee perceptions. In this sense, the term 'ideal type' and associated architectures do not carry a positive or negative connotation.

Figure 2.1: HR architecture 'ideal types' as presented by Ridder et al. (2012, p.5)



HR architecture dimension one: HR orientation

From the RBV, organisations invest in their talent pool in order to generate value for the firm (Barney, 1991; Wright & McMahan, 1992). Hence, HR orientation represents a firm's application of HR practices to retain and develop its staff members and achieve intended employee outcomes.

In contrast to for-profit and non-profit organisations, while UCOs do seek financial returns or have commercial goals, these goals are not pursued for their own growth, but for the benefit of the university. Also, the fact that UCOs sit at the interface of private sector and academia adds to the complexity. This may make it difficult for UCOs to define the type of employee behaviour that they want to foster or reinforce through HRM, and UCOs may

also find it challenging to identify a single set of motivators and reward preferences that covers all employees' needs.

HR architecture dimension two: Organisational strategic orientation

The strategic HRM approach views organisational strategies as the main reference point for HRM alignment (Baird & Meshoulam, 1988; Delery & Doty, 1996). This dimension represents organisational strategic goals.

In comparison to firms in the private sector, strategies and strategic goals in UCOs can be ambiguous as these organisations need to consider multiple stakeholder interests that are often contradictory and driven by very different rationales. Consequently, UCOs may find it more difficult to achieve vertical fit in HRM.

- **The four HR architecture 'ideal types':**

Administrative HRM architecture entails a combination of low HR and strategic orientation in an organisation. Having low orientation for both dimensions indicates that the firm does not develop its HR in a way that creates unique, inimitable value for the organisation, and is thus unlikely to implement practices such as performance appraisal and mentoring, or move beyond basic HR practices such as hiring and remuneration.

Strategic HRM architecture has low HR orientation and high strategic orientation. This combination indicates that the firm strongly aligns its HR programs with organisational strategic goals, and employees' personal or specific needs are of secondary importance when it comes to designing and implementing HR practices.

Motivational HRM architecture entails high HR orientation and low strategic orientation. This architecture type focuses heavily on employees' intrinsic motivation and is more likely to adopt participatory organisational structures. Through making long-term investment in HR development and providing high flexible work arrangements, firms in this category build employee capabilities and also create inimitable firm-specific resources. However, due to more focus being placed on individual needs, there may be less clarity in relationships between the HR programs and employees' work tasks, and both horizontal fit and vertical fit of HR practices can be weak.

Value-based HRM architecture has high HR orientation and high strategic orientation. This combination indicates that the firm aligns its HRM with both employees' needs and organisational strategic objectives. This architecture type requires high investment in all

HR areas, and such investment must not only be a means to realise the organisational strategy, but also an end in and of itself.

The four HR architecture ideal types are further differentiated by different levels of sophistication in two second-order factors, HR programs and employee perception of HRM (Ridder et al., 2012). These are discussed in the next two sections.

2.2.2. HR Programs

The sophistication of an organisation's HR programs depends on three dimensions: HRM investments, alignment of HR practices, and proportion of workforce covered.

HR programs dimension one: HRM investments

The sophistication of HR architecture on this dimension may be represented by the ratio of HR staff to total employee number; and number, quality and intensity of HR practices. In order to examine this dimension, it is important to consider the significance of HRM, mechanisms through which HRM affects employee perception and performance, as well as HR practices involved in different HR domains.

HRM practices influence employee performance through three main mechanisms: employees' ability, motivation and opportunities to contribute (Boxall, 2003; Boxall & Purcell, 2011; Huselid, 1995; Lepak et al., 2006). First, HR systems directly affect employees' ability to perform via activities that influence their knowledge and skills (such as selection, acquisition and development). Second, HR systems affect employees' motivation both directly and indirectly through activities such as performance appraisal, selection of incentives, and internal promotion. Third, HR practices influence employees' opportunity to perform through features such as job design, organisational structure, and voice mechanism. HR systems that foster better use of these mechanisms will enhance individual perception of HRM and thus employee performance. This model, which focuses on HRM at the level of individuals within the psychological tradition, is generally referred to as the AMO framework (Paauwe, 2009).

This research examines HR practices according to the HR policy domains and corresponding practices as presented by Jiang et al (2012). These domains are synergistic and interdependent within a HR system. At lower levels, HR policies are designed to achieve sub-goals of HR domains, and HR practices are implemented to achieve sub-goals of HR policies.

Knowledge, skills and abilities HR Domain

- Recruitment and Selection policies and practices

Recruitment adds value to the firm by enhancing labour cost efficiencies, identifying talent that is rare in the labour market, designing a set of processes that reflects a complex, non-substitutable and inimitable tactics and be aligning with other HR activities so that it supports the benefits of other HR functions (Orlitzky, 2008). It is also important for an organisation to match up projected workforce requirements with human resource supply, often indicating a need to recruit in advance of actual requirements to allow time for training and development (Compton et al., 2006). The roles of recruitment and selection are to ensure that the organisation is adequately and effectively staffed at all times and it is also a means of publicising the organisation by presenting a favourable image to the applicants (Compton et al., 2006; Searle, 2003). As recruitment determines the pool of candidates from whom new employees will be selected, it controls and limits the potential value of other downstream HR processes such as selection, training and development (Orlitzky, 2008).

- Training and Development policies and practices

After establishing human resource requirements, recruitment, selection and training follow as a “linear trilogy”, with training aiming to provide a workforce with essential skills (Winterton, 2008). Training prepares the new employee with the skills and knowledge required for the particular kinds of work, and it is important that training policies and practices are informed by theories of learning (Wilson, 2005; Winterton, 2008). In contrast to training, development involves a wider range of activities with less specific aims, goals or learning outcomes and is focused more on the individual’s long-term personal growth and career advancement rather than the occupation (Wilson, 2005). Together training and development in organisations include tasks ranging from needs analysis, training approach determination, program design and analysis, identification and providing of appropriate resources, conducting training, to training and development function management (Goldstein, 1993; Wilson, 2005).

Motivation and effort HR domain

- Performance Appraisal policies and practices

Performance appraisal addresses how an organisation evaluates, utilises and develops the skills and abilities of its employees to make sure that organisational objectives are achieved, and to ensure that its employees are gaining satisfaction from their jobs while making effective contributions to the organisation (Anderson, 1993). The performance appraisal function has significant implications for the planning, research, development and recognition of human resources in organisations. For HR planning, performance appraisal identifies employees' knowledge, skills, potential and training needs. For HR research, appraisal measures the effectiveness of current training programs and organisational mechanisms. For HR development, performance appraisal discovers individual training needs and establishes programs accordingly. For HR recognition, performance appraisal determines promotion, transfer, termination and remuneration decisions (Henderson, 1980). Performance appraisal engages with other areas of HR functions including recruitment and selection, training and development, remuneration and succession planning, as the performance appraisal outcome informs these activities.

- Remuneration and Incentive policies and practices

Remuneration is the specific configuration or methods of payments and rewards that together make up an employee's total income, whereas incentives denote the type of reward that may be delivered to employees (Ibbetson & Whitmore, 1977). Management of rewards is about management of what employees can expect in return for their contribution and what employers can expect from the employees in return for their pay. These expectations are built into the employment relationship and are defined by both transactional and relational contracts (Armstrong & Murlis, 2004). Remuneration and incentives are closely tied to employee motivation, which is essential to high productivity (Ibbetson & Whitmore, 1977).

Opportunities to contribute HR domain

- Employee involvement and job design policies and practices

There are two main types of approach to manage employee voice (Boxall & Purcell, 2011). The first type gives employees a high level of freedom to decide how they want to do their jobs. These decisions may range from different working methods to different working

times, and such decisions are often made informally and directly between individuals and their supervisors. Green (2008) suggests that committed and highly-skilled employees enjoy greater discretion, and this approach is also associated with higher level of autonomy. The second type of employee voice mechanism is more indirect, as managers usually negotiate work arrangement and decisions with employee-elected or trade union appointed representatives. This approach is more formal and reflects underpinning societal regulation and associated collective bargaining rights. The extent to which individual employees participate in decision making is often determined by their location in the organisation's hierarchy as well as the types of decisions being made (Boxall & Purcell, 2011). Although often divided into different functions, all HR functions are interrelated and together these functions are tied closely to the development and strategic orientation of the organisation. Therefore, it is also important to note that an organisation's HRM system cannot be treated as a vacuum and must be analysed or evaluated against the organisational context and environment (Guthrie, 2008).

HR programs dimension two: Alignment of HR practices

The alignment of HR practices varies, depending on the degree of alignment of the above HR practices within the HR systems (both horizontal and vertical).

HR programs dimension three: Proportion of workforce covered

This dimension depends on the proportion of employees covered by the organisation's HR practices. It is possible for firms to differentiate staff members basing on the uniqueness and value of their knowledge, skills and ability, and apply different HR practices accordingly (Lepak & Snell, 1999, 2002). Therefore those who are viewed as more valuable to the organisation may receive a greater share of HR investments than those whose skills are viewed as more replaceable.

2.2.3. Employees' Perception of HRM

The other second-order factor of HR architectures is employees' perception of HRM, which depends on three dimensions: perceived quality of implementation, usage by employees, and perceived fairness.

Employee perception dimension one: Perceived quality of implementation

This dimension examines the extent to which employees view the HR practices as understandable and useful.

Employee perception dimension two: Usage by employees

Usage of HR practices examines the visibility, availability and consistency of the organisation's HR practices over time from the employees' perception.

Employee perception dimension three: Perceived fairness

Employees' perceived fairness of HR practices depends on the perceived equity of access to these practices.

Importance of organisational climate

Employees' perception of the organisation's HRM is a key determinant of HR's success in creating the intended organisational climate, which is an important mediator of the relationship between the HR system and organisational performance (Bowen & Ostroff, 2004; Rogg, Schmidt, Shull, & Schmitt, 2001). In order to successfully implement organisational strategy and achieve maximal performance, firms are likely to adopt a particular configuration of practices in their context and in turn create the type of climate that best fits the firm's objectives (Delery & Doty, 1996). For example, Doorewaard & Meihuizen (2000) find that professional service firms may create climates that emphasise expertise or efficiency, depending on their strategy, through HR practices. Expertise-oriented firms tend to adopt HR practices that value creativity, project-oriented teams and create human processes that are hard to imitate. On the other hand, efficiency-oriented firms tend to employ HR policies that focus on bureaucratic regulations that create unique organisational structures that are hard to imitate. Therefore, HR's contribution to the development of organisational identity may be a critical link between HRM and the organisation's competitive advantage (Kogut & Zander, 1996) or performance (Collins & Smith, 2006). The climate approach focuses on multilevel relationships, with both psychological climate and organisational climate mediating the link between HRM system and firm performance (Bowen & Ostroff, 2004).

The psychological contract refers to the individual employee's perception and sense-making of the environment in relation to the organisational goals and expected work behaviour (Bowen & Ostroff, 2004). Although managers of organisations can communicate their intentions through HR systems, it is the variance in employees' perception of the organisation's climate that determines the effectiveness of the organisational climate in relation to performance (Veld, Paauwe, & Boselie, 2010). Subsequently, employees display different attribution and interpretation of the same HR

practices, which in turn affects their commitment and satisfaction. It is these attitudes that become shared within job groups and are related to unit-level work behaviours (Bowen & Ostroff, 2004; Nishii, Lepak, & Schneider, 2008).

On the other hand, organisational climate refers to perceptions shared at the firm level, for example, the types of behaviours that are expected and rewarded in the firm (Bowen & Ostroff, 2004). Such a climate can be created through the firm's HR policies and practices (Doorewaard & Meihuizen, 2000). HR systems create a strategic climate by communicating to employees the organisation's nature, employees' value to the firm and the employee behaviours that are expected (Bowen & Ostroff, 2004; Nishii et al., 2008). To ensure the establishment of collective perceptions and attitudes among employees, it is necessary to integrate both the content and process of a HRM system. HRM content refers to particular policies and practices intended to achieve certain organisational objectives, whereas HRM process denotes the implementation of a HRM system. In addition, HRM systems that are high in distinctiveness, legitimacy of authority, relevance, consistency, instrumentality, validity and consensus are more likely to create a strong climate where meaning of the content is shared. This will lead to positive organisational performance (Bowen & Ostroff, 2004). However, there can also be mismatch between intended HR practices and implemented HR practices (Khilji & Wang, 2006). Factors such as CEO, senior management and organisational support for HRM can determine effectiveness of HRM implementation (Bartram, Stanton, Leggat, Casimir, & Fraser, 2007; Sheehan, Cooper, Holland, & De Cieri, 2007). Grant (1999) also points out that differences between managerial rhetoric and action indicate failure to meet employee expectation and this may have negative implications for organisational performance.

However, while the above may imply that effective organisational climates need to be created through ensuring congruency of messages, Boxall, et al. (2011) argue that rather than reinforcing one single set of HR messages, the issue of internal fit should be better understood as "a blending process" through which a mixed set of messages, usually complex and sometimes contradictory, supports the organisation's strategic model. It is therefore essential to identify these sets of messages and examine the process and extent to which they influence employees' perceptions and work behaviour. It is also important to note that the creation of organisational climates through HR systems reflects the notion of equifinality, which indicates that the same organisational climate may be created via

different sets of idiosyncratic practices that fit their particular contexts (Delery & Doty, 1996; Kehoe & Collins, 2008).

2.2.4. Configurations of HR Architecture ‘Ideal Types’

Corresponding to the above second-order factors and dimensions, each of the four HR architecture ideal types has its own unique HR programs and employee perception configuration (Ridder et al., 2012). Table 2.1 presents an overview of the second-order factors under the two HR architecture components of HR programs and employee perception of HRM. This research substitutes Ridder et al.’s terminology “HR practices” with “Employee perception of HRM” for two reasons. First, it prevents confusion between the two HR architecture components (“HR programs” involves the examination of actual, implemented HR practices). Second, the rating of second-order factors under the second HR architecture component (perceived quality of implementation, usage by employees, perceived fairness) is based on employees’ judgement, experience and feedback. Therefore the label “Employee perception of HRM” is more appropriate for the nature of these second-order factors, and the context and focus of this research.

	HR Programs			Employee perception of HRM		
	HRM investments (Ratio of HR staff to total employees; number, quality and intensity of HR practices applied)	Alignment of HR practices (Degree of vertical and horizontal fit of HR practices)	Proportion of workforce covered (Percentage of employees covered by the firm's HR practices)	Perceived quality of implementation (Employees’ perceived understandability and usefulness of HR practices)	Usage by employees (Visibility, availability and consistency over time of applied HR practices)	Perceived fairness (Employees’ perceived equality of access to HR practices)
Administrative HRM	Low	Weak	Small	Low	Low	Low
	Rudimentary HR programs			Negative employee appraisal of HR practices		
Strategic HRM	Moderate	Strong	Small	Moderate	High	Low
	Semi-sophisticated HR programs			Moderate employee appraisal of HR practices		
Motivational HRM	High	Weak	Large	Moderate	High	High
	Semi-sophisticated HR programs			Moderate - positive employee appraisal of HR practices		
Value-based HRM	High	Strong	Large	High	High	High
	Sophisticated HR programs			Positive employee appraisal of HR practices		

Table 2.1: HR architecture configurations: second-order factors, based on Ridder et al. (2012, p.7)

Administrative HRM: Organisations that follow this architecture have low investment in HRM, low alignment of HR practices and HR practices are limited to basic activities such

as hiring and paying. Organisations only have limited resources to spend on the employees and may even have to aim for cost reduction due to funding pressures. Employees perceive quality of HR implementation, actual usage of HR practices and HR fairness to be low. Organisations that adopt this HRM architecture view workers as a cost rather than as valued assets. Employees perceive low quality of HRM implementation, low usage and low fairness for administrative HRM practices.

Strategic HRM: For this model, the level of investment in HRM is moderate and alignment of HR practices is strong, yet a selected proportion of employees receives significantly more HR investment than others (for example, the firm may choose to invest more in training and development for client-facing or revenue-generating staff members). The market logic dominates the HR programs and initiatives and organisations that adopt this architecture are likely to allocate pay for performance incentives based on measurable employee output (Gray & Benson, 2003). Organisations that adopt Strategic HRM architecture link the purpose of HRM to their strategic goals and the main focus is to enhance organisational viability and growth. These firms strategically differentiate their staff members and adopt practices such as talent management in order to make selective investments, and HR programs are viewed as instrumental to addressing and achieving the firm's strategic objectives (Lepak & Snell, 1999, 2002). Employees have mixed views on the firm's quality of HRM implementation, usage and fairness appraisals for strategic HRM practices. Some may perceive the firm's HRM more positively than others. Others may have moderate views that are neither overwhelmingly positive nor negative.

Motivational HRM: Firms that adopt this model make a high level of investment in HRM and the proportion of workforce covered by the HR programs is also high, yet alignment of HR practices is low. Actual usage of HR practices and perceived fairness of these practices are high. This HRM architecture encompasses organisations that direct HRM towards employees' needs and intrinsic motivation. These firms make long-term investment in their staff members' unique strengths and expertise in order to foster staff development and involvement (Toh, Morgeson, & Champion, 2008). Rather than focusing on creating mutually reinforcing bundles of HR practices that aim to encourage intended staff behaviour, firms that adopt the motivational HR architecture focus more on individual needs. Therefore employees of these firms are more likely to develop a belief that the firm values their contribution and cares about their well-being (Nishii et al., 2008). Employees

have moderate to positive views and feedback on the firm's HRM implementation, usage and fairness for motivational HRM practices.

Value-based HRM: For this model, investment in HRM and proportion of workforce covered are both high and there is also strong alignment of HR practices. There is a high level of HR usage and employees perceive high quality of HR implementation as well as fairness. This HRM architecture encompasses organisations in which employees' motivation is highly aligned with the organisation's strategic goals. As a result, these firms implement commitment-oriented HR programs with a long-term focus and cover a large proportion of their staff (Arthur & Boyles, 2007; Colbert, 2004). Employees have positive appraisals for value-based HRM practices.

This research does not exclude the possibility that a UCO may incorporate characteristics of two or more architectures rather than implementing one single, stable model. The selected cases may, for example, be at a transitional phase between two or more architecture types due to organisational development, restructuring and expansion. As the chosen cases are organisations that are still evolving within volatile environments, their HR strategies may reflect such instability and are likely to incorporate characteristics from multiple 'ideal types' or illustrate a shift from one type to another. This may also be reflected in different employees' appraisals of the company's HRM. For example, if a UCO is moving from an administrative architecture to a motivational architecture, employees who joined the company more recently (and experienced HR programs that resemble the motivational architecture) should appraise the company's HRM more positively than those who joined a long time ago (who experienced HR programs that resemble the administrative architecture).

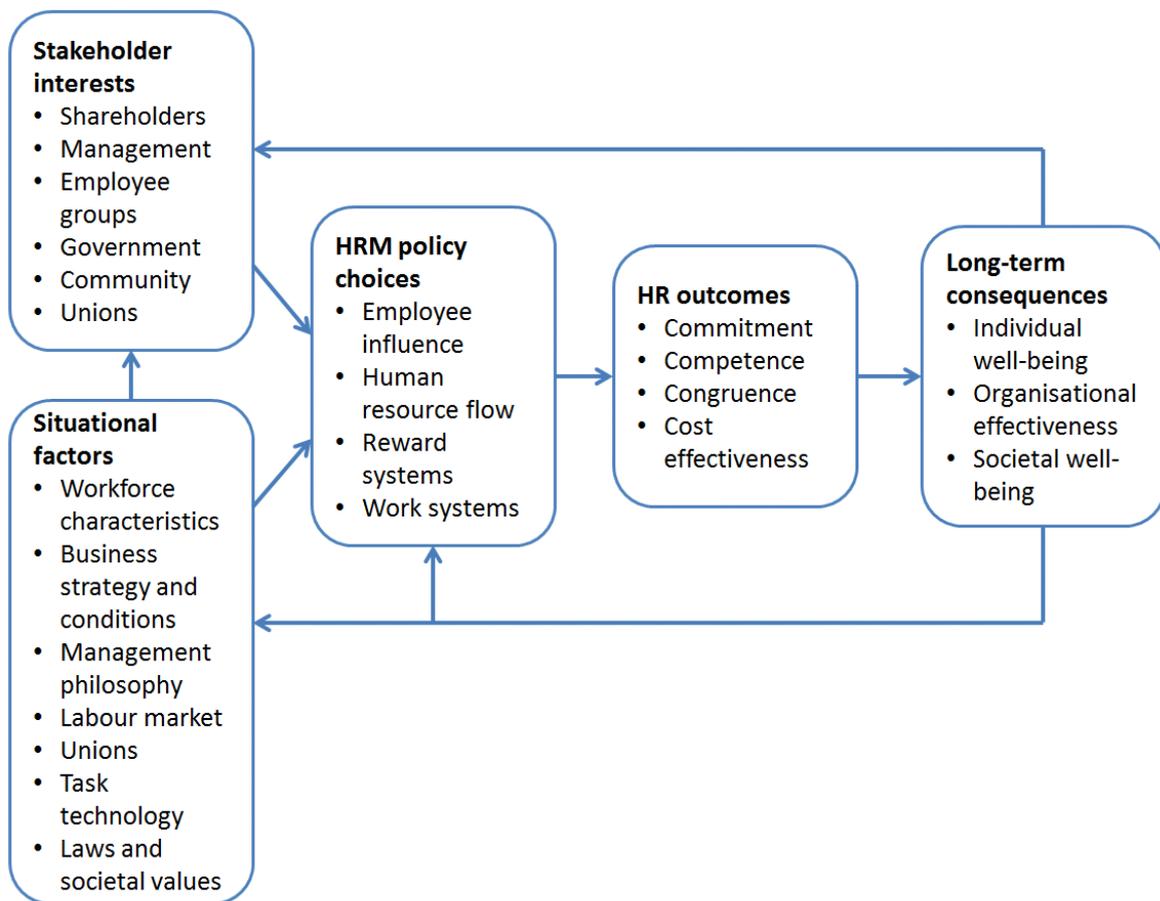
This thesis seeks to identify how the selected cases' HRM models reflect the architecture types by matching the organisations' HR systems and employee perceptions against the described configuration for the four architecture types.

2.3. HR Decisions and Contextual Complexity

In order to understand better how firms have come to certain HR strategy and designed certain HR architectures, it is necessary to consider contextual complexities that shaped these decisions. Although Osterman (1987) suggests that firms are guided by the three rationales of cost effectiveness, predictability of talent supply and flexibility in response to

changing circumstances when making decisions on work organisation, HR decisions are more complicated and in practice involve more considerations. These choices reflect both political compromises and cognitive challenges, and are shaped by contextual contingencies (Boxall & Purcell, 2000). Factors such as physical technology and labour force characteristics will constrain firms' ability to make consistent decisions and pursue strategic objectives, and it is also the interaction among these variables that will lead to idiosyncratic subsystems which may bring organisations sustained competitive advantage (Osterman, 1987).

Figure 2.2: The HR Contingency Framework



The relevance of contextual complexity to HR policies and practices is highlighted by the contingency model (Beer et al., 1984), depicted in Figure 2.2. The contingency perspective suggests that different HRM practices need to be designed or adopted for different organisational strategy (Beer et al., 1984; Bowen & Ostroff, 2004) and different contexts (Boxall & Purcell, 2011; Jackson & Schuler, 1995). The contingency model identifies a number of factors that shape HRM policy choices. These include organisational technology,

institutional structure, size and life cycle stage as part of the firm's internal environment (Aycan, 2005; Paauwe & Boselie, 2003), as well as legal, social, and political contexts, level of unionisation, employment market conditions and national culture in the organisation's external environment (Gooderham, Nordhaug, & Ringdal, 1999; Hofstede, 1983; Jackson & Schuler, 1995).

This research considers different contextual contingencies that have influenced the UCOs' HR decisions, as these reflect important factors that shaped HR strategies and HR systems in different UCOs. This allows this thesis to make comparisons and examine differences among the selected cases more effectively.

2.4. UCO Strategy and HRM in UCOs: Significance and Implications

Existing literature identifies numerous common indicators that measure commercialisation performance, including number of inventions disclosed per amount of money spent on research; number of patent applications filled and granted per amount of money spending on research; licenses and options executed relative to number of inventions disclosed; average income per license; number of start-up companies; number of commercialisation staff and administration; and gross revenue from licensed technology (DEST, 2005; Sobol & Newell, 2003). These quantitative indicators of UCO performance reflect a highly revenue-oriented UCO strategy. However, this research recognises the possibility for different UCOs to have different company objectives and thus emphasise different performance indicators. It is therefore one of the objectives of this thesis to find out whether there are other UCO strategic foci and whether UCOs evaluate their own performance using criteria that are different from those outlined above.

According to Boxall (2003), firms in the service sector require higher levels of match between HR strategy and organisational strategy in comparison to the manufacturing sector. This is because quality and knowledge are more important in the service sector's competitive strategy and thus opportunities for HR advantages are greater and broader. There is also a positive relationship between the extent to which a firm's competitive strategy values quality and knowledge and the potential HR advantages it could gain. To date, researchers only paid limited attention to the organisational context and climate of university commercialisation (Yusof & Jain, 2010) and in particular placed even less focus on UCOs' HR activities (Rothaermel et al., 2007). However, HR capacity of commercialisation offices is considered one of the most influential factors on the

performance of commercialisation offices (O'Shea et al., 2005; Ustundag et al., 2011). Swamidass and Vulasa (2009) identify UCO staff shortages as one of the key bottlenecks in university technology transfer, with around a third of the UCOs surveyed claiming that they did not process over 26% of the university inventions in 2006 due to staff and budget shortages. At the interface of university and industry sectors, staff members of commercialisation offices are responsible for coordinating the activities that result in the consummation of commercial arrangement between the university (and its scientists) and a firm (Siegel, Waldman, Atwater, & Link, 2004). Therefore it is important for commercialisation offices to hire a complementary and competent combination of employees who possess technical and commercial skills as well as legal knowledge (Siegel et al., 2003).

There are also several characteristics of UCOs that make them different from other service organisations. First, economic viability is less central to their survival as UCOs are established and are most often wholly-owned by universities (as is the case for the examples in this thesis). This can have significant implications for UCOs' strategies as this means that it is possible for these organisations to place more focus on non-financial goals. It can also mean that unsatisfactory performance or inadequate management will not have an immediate impact on the organisation's survival. Second, not only do UCOs have multiple stakeholders, but these stakeholders come from different sectors that are dissimilar in terms of their interests, focus and needs. For examples, the goals and attitudes of a university academic towards commercialising or contracting research can be very different from that of a business partner or government client. This means that it is often difficult for UCOs to develop a strategy that can achieve vertical and horizontal fit in terms of HRM and satisfy its stakeholders.

Exploratory studies on the effectiveness of university commercialisation offices have identified a number of characteristics that distinguish UCOs' staffing practices from that of other types of organisations. For example, Siegel et al. (2003) identify the importance of low turnover rates among licensing officers, as this will significantly affect the ability for commercialisation offices to establish long-term relationships with firms and entrepreneurs. There are also reports on the need for commercialisation personnel to possess not only technical knowledge and expertise, but also business experience, marketing and negotiation skills (Siegel, Veugelers, & Wright, 2007; Siegel et al., 2004; Swamidass & Vulasa, 2009). These highlight the importance of recruitment, retention and development

in UCOs. Furthermore, Markman, Gianiodis, Phan, & Balkin (2004) and Siegel, et al. (2007) also discuss the challenges in attracting, developing and retaining good commercialisation office personnel. First, new commercialisation office staff require longer on-the-job training period, as these personnel usually come from a myriad of different backgrounds. Second, developing networks with industry and faculty require many years of professional engagement. Third, at the forefront of innovation where market, legal and technological issues coalesce, commercialisation office jobs entail high levels of uncertainty, confronted by staff members routinely. These factors make it more difficult for commercialisation offices to attract and retain employees, while at the same time requiring high levels of investment in the training and development of these personnel. Therefore, the role of incentives in attracting and retaining commercialisation office personnel is further emphasised.

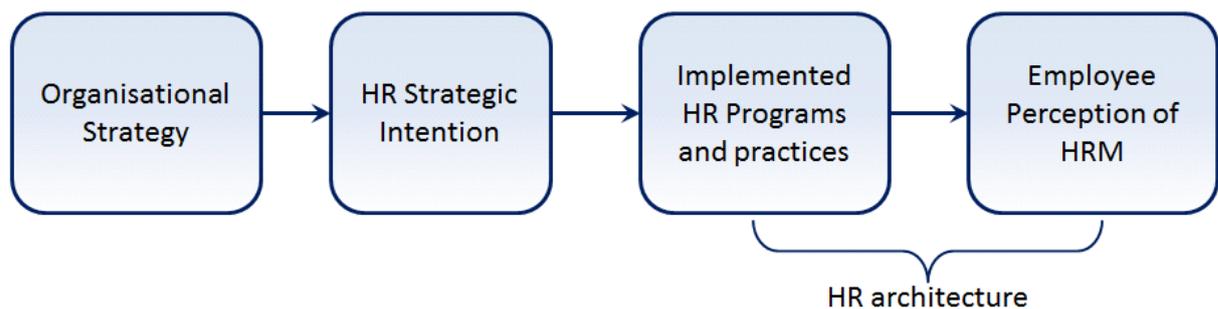
In sum, HR has different implications for UCOs in comparison to traditional service sector organisations. Due to their boundary-spanning nature, UCOs are likely to place much stronger value on for example networking, and this may reflect on both their preferred recruitment method and organisational climate (Markman et al., 2004; Siegel et al., 2007). The strategic implication of retention is greater, as losing commercialisation officers may lead directly to losses of valuable connection and networks, as well as all the investment made to train and develop these members. There is also greater opportunity for UCOs to select non-traditional incentives and rewards that are tied to employee performance, as well as using more direct voice mechanisms to manage these highly skilled and experienced individuals who are likely to enjoy greater discretion.

2.5. Research Model and Operationalisation of Variables

This research is interested in exploring how different commercialisation strategies and goals affect HR strategy and intentions. It also examines how HRM creates a climate for commercialisation, taking into account the effect of internal and external contexts on these strategies and systems. This research identifies the interplay between managerial intentions versus actions in HRM and employee perceptions of managerial behaviour, HR practices and organisational climate. It also examines the organisation's strategic approaches to HRM, as well as how individual staff members are responding to and perceiving such approaches.

Based on the literature reviewed, components that are critical to the examination of how HRM contributes to organisational performance are identified. First, taking contextual factors into consideration, managers are likely to determine a HR strategy that they believe will best serve the organisation’s objective. Based on this strategy and having certain intentions in mind, managers will design and implement HR programs and practice bundles, which they hope will create an organisational climate. It is also important to examine the extent to which managerial intentions match managerial actions (in the form of HR practices and routines), as this is an important factor that explains in part employee perceptions and psychological contract. Different HR programs will result in different employee appraisal of the organisation’s climate and HR practices. Such appraisal has significant implications on their behaviours and level of contribution to the desired organisational performance. Based on the above, this thesis presents and examines the following research model:

Figure 2.3: Conceptual research model



- **Organisational strategy**

Boxall and Purcell (2011, p. 48) define organisational strategy as attempts that firms make to address strategic problems they face and are characterised by “...ways in which the managers of firms understand their goals and develop resources- both human and non-human- to reach them”. It can also be understood as sets of strategic choices that firms make. Unlike most other private sector firms, UCOs are less concerned with their own survival as they are usually owned by the university they serve. Therefore it is likely that some UCOs will pursue make strategic choices that place less focus on maximising financial returns. This variable examines how executive members and managers of UCO understand the organisation’s goals and what sorts of decisions they make in order to achieve the company’s objectives.

- **HR strategic intention**

Management intentions represent the outcomes of the designed HR system as envisaged by managers. This variable seeks to find out the rationale behind the design of the HR system and what sort of outcomes or employee behaviour that managers believe will be elicited by the system and practices. As management intentions of HRM are part of organisational and HR strategy (Wright & Nishii, 2004), this thesis also examines the alignment between the organisational strategy, HR strategy and management intentions. This variable identifies the types of climate these UCOs aim to achieve by means of their HRM strategies.

- **Implemented HR programs and practices**

Stemming from HR strategy and managerial intentions of HRM, management actions in HRM are operationalised in accordance to Ridder et al's (2012) definition of HR programs, including: the level of HR investment (measured by ratio of HR staff to total staff; number and quality of HR practices), alignment of HR practices (measured by level of vertical and horizontal fit), and proportion of employees covered by the organisation's HR practices.

This variable also captures the differences and disconnections between HR intentions and what is actually practised or implemented, as there are often gaps between managerial rhetoric or espoused intention and actual action or practices (Boxall & Purcell, 2011; Grant, 1999; Nishii et al., 2008). As previously outlined, such disconnection has a negative impact on employee attitudes and behaviour, and may hinder the achievement of the HR intentions. Therefore, this variable compares the actual HR practices by examining the routines in place while also comparing the description given by those who implement the practices (e.g. team leaders) and the description of experience made by individual employees. This allow further analysis to be made of the HR system's internal fit.

- **Employee perception of HRM**

Nishii, et al. (2008) stress the need to investigate the meanings imposed on HR practices by employees, as employees' perceptions of the climate created by HR systems may be the most significant factor that explains the difference between the managerial intentions and the actual effects of HR practices. This variable looks at the variance in individual employees' perception of organisational climate as outcomes of variance in both HR practices as well as their own schemas. It also looks at this variable at a collective, organisational level. This variable follows Ridder et al's (2012) definition and examines employees' perceived quality of HR practices implementation, usage of these practices

(visibility, availability and consistency), and perceived fairness. It also explores employees' perception of the organisation's climate (in other words, what sorts of behaviour or performance they believe is important or valued in the organisation).

2.6. Chapter summary

This chapter outlined the relevance of RBV to HRM, the notion of HR architectures and the components of HR architectures. It also acknowledged the importance to identify contextual factors that influence HR decisions. Based on these concepts and the HR architecture framework, a conceptual research model is developed. This model is applied to the examination of the three UCOs, which will be presented in Chapters Four, Five and Six respectively. Before proceeding to the empirical reporting of case findings, the next chapter discusses the research paradigm, method and design adopted by this thesis.

CHAPTER THREE: RESEARCH METHOD

3.1. Research Paradigm

This research adopts a qualitative interpretivist perspective, which assumes that different individuals have different interpretations of reality (Merriam, 1988). The qualitative interpretivist paradigm emphasises the importance of interpersonal interactions and individual perceptions; therefore it only makes sense to interpret rather than measure the social world (Collis & Hussey, 2009). The qualitative perspective is interested in meanings that are entrenched in individual's experiences, which are also mediated through the researcher's own perceptions (Merriam, 1988; Taylor & Bogdan, 1998). Therefore, interpretivists aim to discover how people experience and make sense of a setting or a process (Locke, Spirduso, & Silverman, 2000). This involves finding out how individuals assign meanings to their experiences as well as discovering through what processes they achieve their goals in particular contexts. As a result, there are multiple faces of reality that are relative to individual differences (Locke et al., 2000; Morse & Richards, 2002). This research regards HRM effectiveness as something to be comprehended by the individuals, who are engaged in the practices, whether as managers or employees. It also accepts that different individuals can experience the same HRM practices differently. The paramount objective of this research is to understand the meanings associated with UCO staff members' experience of HRM and how aspects of UCO's HRM work together to form a complete system (Merriam, 1988).

Marshall (1996) and Merriam (1988) suggest that the selection of a particular research paradigm is determined by how the research focus is shaped, by the questions it raises, and by the type of research outcome desired. The qualitative approach is appropriate when the purpose of research is to understand an area in which little is known or in which existing understanding appears inadequate, or to make sense of complex situations (Morse & Richards, 2002). The qualitative approach aims to "provide the maximum opportunity for the researcher to learn from the subjects, or participants in the research", which makes it appropriate for relatively novel contexts (Bouma, 2000, p. 178). The qualitative interpretivist paradigm is appropriate for this research as this research focuses on the configuration and alignment of HRM in the novel contexts of UCOs. As other research to date placed little focus on this matter, entering the field without a rigid set of hypotheses and assumptions at the outset will better allow for new and interesting discoveries.

Qualitative research attempts to understand unique situations and interactions as embedded in their particular contexts (Patton, 2002). The analysis aims for depth of understanding within the context rather than trying to control or minimise contextual influence. The practice of HRM is highly contextual and is under the influence of multiple factors in the external environment and organisational setting. It is therefore only practical to examine HRM within its setting and context and identify how it interacts with these environmental factors. Through adopting the qualitative interpretivist paradigm, this research strives to gain an understanding of how UCOs design and orient HRM to fit their particular contexts and meet their organisational needs.

3.2. Research Strategy

This research adopts the research method of multiple-case studies. Many researchers highlight the role of the case study approach in examining complex phenomena or issues within their contexts (Baxter & Jack, 2008; Collis & Hussey, 2009; Yin, 2014). It seeks to understand a contemporary phenomenon that encompasses important contextual conditions in depth and obtain detailed information about the unit of analysis (Collis & Hussey, 2009; Yin, 2014). According to George & Bennett (2005, p. 19), case studies allow researchers to carry out “contextualised comparison” which “self-consciously seeks to address the issue of equivalence by searching for analytically equivalent phenomena- even if expressed in substantively different terms- across different contexts”.

This research chooses the case study strategy because it aims to uncover the interaction of significant factors and it aims to provide holistic description and explanation of HRM in UCOs. The case study method effectively meets these research objectives because it is particularly suited to situations where it is impossible to separate the phenomenon’s variables from their context (Merriam, 1988). Also, this research is concerned more with discerning operational links that require tracing over time rather than identifying behavioural outcomes, which again reflects the nature and purpose of the case study strategy (Merriam, 1988; Yin, 2014).

The case study approach is appropriate when the focus of research is more on learning about the informants’ perspective rather than specifying the accuracy of these accounts (Merriam, 1988). As such, this research is interested in how informants appraise their own HRM experience and the reasons behind such appraisals. In addition, the case study is an effective research method when it comes to answering “how” or “why” questions in areas

of research where relatively little is known (Eisenhardt & Graebner, 2007; Ghauri, 2004; Yin, 2014). This reflects the context of this research and the questions it poses as outlined in the previous chapter.

Another strength of the case study method is that it allows for in-depth exploration through multiple data sources and methods of data collection (Robson, 2002). It uses different data collection methods and data sources to explore and examine a phenomenon (or new institutions in this research), and achieves a rich description from the participants' point of view (Stark & Torrance, 2005). Section 3.4 will discuss this particular aspect of case study research in more depth.

Units of analysis: Multiple-case study at organisational level

Yin (2014) points out that multiple-case design has more analytic benefits than single-case design and, also, research findings based on evidence from multiple cases are more powerful and compelling than those from a single case (Amaratunga & Baldry, 2001; Merriam, 1988). This is because the multiple-case study approach provides a broader range of evidence than single cases, which results in a stronger study (Yin, 2012). The aim of the multiple-case study approach is to look at processes and outcomes across different cases, to examine how they are affected by local contexts and thus build more sophisticated descriptions and reasoning (Miles & Huberman, 1994). The multiple-case design first collects data on multiple cases, performs both within-case and cross-case analyses and then draws a single set of cross-case conclusions (Amaratunga & Baldry, 2001; Yin, 2014), thus allowing the researcher to explore differences within and between cases (Baxter & Jack, 2008). In line with this argument, this research selects and compares three UCOs. The following section explains the rationale and criteria for case selection.

3.3. Sample and Accessibility

Selection of cases

As opposed to quantitative studies, the goal of qualitative case studies is not to generalise results of the study to the wider population (Merriam, 1988; Sandelowski, 1995). Rather, the researcher's main objective is to discover, understand and gain insight. Therefore it is important for qualitative research to select purposefully cases that will best help the researcher answer the research question by providing sufficient access to information (Yin, 2014), instead of relying on random sampling techniques that are used for generalisation

purposes (Bouma, 2000; Creswell, 2009; Eisenhardt, 1989; Marshall, 1996). In addition, practical issues such as time availability and financial resources for travelling are also important factors to consider (Ghauri, 2004). Therefore, this research applies what Merriam (1988, 2002) and Patton (2002) refer to as the “purposeful sampling” method, which is a nonprobability sampling method that identifies a sample from which the researcher can learn the most. This sampling method requires the researcher to establish the criteria necessary for units to be included in the research and then selecting a sample that fits these criteria. This research selected cases based on the following criteria:

- **Quality of research:** Having sufficient world-class research being conducted in the university is one of the three essential conditions for successful university research commercialisation (Collier, 2008). Therefore, this research only considered UCOs based in large, comprehensive and research-based universities. In order to further ensure proximity, this research selected from universities that are part of Universitas 21, a leading global network of research universities.
- **A separate HR function:** While there are many universities in the two selected countries that are engaged in research commercialisation activities of some sort, the focus of this research is on the HR practices of commercialisation offices. Therefore, the selected organisations must be a separate institution from its university (and hence have a separate HR function from its university). Also, in order for there to be sufficient data, and to make effective cross-case comparison, these commercialisation offices must be relatively mature organisations rather than recent establishments. This research only considered UCOs that have a history of over one decade.
- **Accessibility:** As most of the information that this research is interested in collecting may be considered commercially confidential, the participating organisations have to be willing to participate in this research and disclose confidential information. This is a major consideration in the final selection of cases, as it is impossible to obtain any meaningful data on UCOs’ HRM without entering the organisations and having access to their staff members.

In line with case selection guidelines provided by Seawright and Gerring (2008), the criteria above ensure that the most similar cases are selected, and thus this research can be more confident that any cross-case differences discovered are not subject undue variances.

However, as it was not possible to obtain detailed information on the HR systems for these organisations until the fieldwork phase, it was difficult and to categorise or clearly describe the differences between these organisations' HRM effectively prior to the field research phase. It was also unnecessary to do so as it is helpful to enter the site without preconceptions when conducting qualitative case study research (Bouma, 2000). Nevertheless, it is reasonable to believe that every organisation has different contexts and HR systems that create different climates. This belief has subsequently been proven (see Chapters Four to Six).

This research selected three UCOs and each UCO is one unit of analysis. Sample size depends on what the researcher wants to find out, the purpose of the research, and what can be achieved with available time and resources (Patton, 2002). Considering these factors, three units are most practical and appropriate for the scope and purpose of this research, as it allows for cross-case comparison on one hand and the generation of detailed within-case insight on the other hand.

Within-case sampling

Each case requires sufficient within-case sampling to gain a variety of data, yet with purposive sampling, the focus is on “the quality of information obtained per sampling unit, as opposed to their number per se” (Sandelowski, 1995, p. 179). The number of informant sources in each case is guided by exhaustion of sources and maximisation of information (Lincoln & Guba, 1985; Sandelowski, 1995). Regarding the appropriate number of informants to interview, Kvale (1996, p. 101) directs researchers to interview “as many subjects as necessary to find out what you need to know”. Following these guidelines, this research ended up conducting 31 interviews in UCO One, 20 interviews in UCO Two and 34 interviews in UCO Three.

3.4. Data Collection

Data sources/ triangulation

Qualitative research involves the biases of both the researcher and informants. Therefore it is important to involve data collection from different sources within a setting, or “triangulation” (Marshall & Rossman, 2006; Welman & Kruger, 2001). Triangulation is one of the key features of a case study method (Ghauri, 2004) and it makes research findings more robust through cross-validating and comparing different sources of evidence

(Jick, 1979; Yin, 2012, 2014). This is a primary means for identifying multiple views of the social world, which in turn ensures comprehensiveness of perspectives and enhances research validity (Marshall & Rossman, 2006; Remenyi, Williams, Money, & Swartz, 1998).

It is important to note that, in this research, triangulation was not used as a means to identify an “objective reality” or to find out whether the accounts provided by one informant are “truer” or “better” than the information provided by another informant. Rather, this research applied the triangulation method to enhance the richness of data and increase the coherence of stories or to draw productive insights from divergent stories. Section 3.6 discusses how this thesis ensures internal validity and authenticity of research findings.

In line with the most commonly employed data collection methods for the qualitative case study approach outlined by Stark & Torrance (2005), Patton (2002) and Remenyi et al. (1998), this research triangulated data collected from face-to-face interviews, documents and observations. In addition, asking different informants to describe, explain and comment on the same phenomenon during interviews also reflected the triangulation technique.

Interviews

Qualitative interviewing is one of the main data collection methods in case studies and is flexible and dynamic (Easterby-Smith, Thorpe, & Lowe, 2002; Merriam, 1988). This data collection method is appropriate for studies that aim to find out how informants experience particular situation, practices or phenomena, especially those that focus on individual views of processes within social units such as a work-group, division or organisation (Robson, 2002). During qualitative interviews, the interviewer, rather than an interview schedule, is the research tool (Taylor & Bogdan, 1998). This allows researcher and informants to build deeper rapport, which in turn increases the chance of gaining honest and accurate responses (Daniels & Cannice, 2004).

Keats (2000) points out that the aim of the qualitative interview is not to alter the belief and behaviour of informants, but to reveal it. Similarly, Lincoln and Guba (1985) describe qualitative research as naturalistic because the researcher attempts to interact and gain insight into informants’ daily life in a natural manner. Therefore this research carried out interviews in a non-directive, non-standardised conversational and open-ended manner

instead of running systematic question-and-answer exchanges (Taylor & Bogdan, 1998; Yin, 2014).

Field interview procedures

Site access- gate keepers and informants

Initially, a letter requesting access and a brief research proposal was emailed to each organisation's CEO (or Acting CEO in one case), who acted as the "gatekeeper" and permitted this study to be carried out in the organisations (Creswell, 2009; Remenyi et al., 1998). The CEOs granted overall access permission for their organisation. Upon the CEOs' referral, I then worked with and negotiated recruitment of informants with second-level gatekeepers, who were HR managers in UCO One and UCO Three, and a CEO assistant in UCO Two. For the first two cases, the second-level gatekeepers forwarded both participant information sheet and interview invitation to informants directly via email after discussing the informant selection approach with me. The informants were free to decide whether they participated in the study or not. In UCO Three, the second-level gatekeeper (HR Manager) emailed a short description of my research and the participant information sheet to all departmental heads (with copies made to me) to inform them of my study. I then followed up these emails by sending interview invitations to the department heads. I also made contact with non-manager staff members by forwarding them the HR Manager's email to the department heads and sending them an interview invitation. This insider assistance with recruitment brought advantage in that it assisted me with identifying and facilitating contact with informants and it also reassured informants as to my credibility and trustworthiness (King & Horrocks, 2010).

According to Taylor & Bogdan (1998, p. 9) "all perspectives are worthy of study" as the objective of qualitative research is to find out how things look from different perspectives. Similarly, Remenyi et al. (1998) suggest having at least one informant per organisation, who is a senior manager that reports directly to, or is a member of, the board of directors, as well as engaging as many members of the staff as possible, including secretaries and support people, in general conversation about the organisation. On the other hand, Eisenhardt & Graebner (2007) highlight the importance of interviewing highly knowledgeable informants from various organisational hierarchy levels, divisions and groups to limit bias. Considering this advice, I interviewed at least one staff member from every department (including both revenue-generating divisions and support divisions), and

managed to interview multiple staff members from the divisions that are larger in size. In one case I was also able to gain access to two members of the board of directors, and in all cases I interviewed the CEOs.

Process and actual interview conduct

- Semi-structured interview

I chose to conduct semi-structured interviews, as this type of interview allows flexibility in informants' responses (Robson, 2002). Flexibility is necessary during qualitative interviews as it allows the researcher/ interviewer to respond to issues that arise in the course of the interview (King & Horrocks, 2010). In addition, during semi-structured interviews, question order and wording can be modified depending on the researcher's decision of what seems appropriate in each case (Robson, 2002).

In order to facilitate structured, focused comparison across the three cases, this research asked a set of standardised, general questions of each case. These questions are developed to reflect the research objective and theoretical focus of the inquiry and ensure the acquisition of comparable data in comparative studies (George & Bennett, 2005). Beyond these general questions, this research made use of an interview guide, which only outlines the key areas to be covered, but leaves the possibility for different phrasing and order of questions (Eriksson & Kovalainen, 2008). This also allowed informants to lead the discussion in unanticipated directions, which often provided opportunities for the release of interesting information. The interview guide was also a "living" document that I constantly updated during the data collection phase as I gained further insight and experience through carrying out the interviews.

According to Easterby-Smith et al. (2002), building rapport with informants is one of the key components in successful qualitative interviews and it adds to the reliability of data collected as it determines whether informants trust and feel comfortable to disclose information to the researcher. Therefore I followed the interview question sequence outlined by Robson (2002), beginning with clear interviewer (researcher) self-introduction and project outline. This is also when permission to audio-record the interview is sought from the informants. Warm-up questions that are easy to answer then follow, ensuring that both the interviewer and informants are comfortable with the conversation before heading into the main body of interview. This technique enables rapport-building within limited time frame and limited pre-interview contact between researcher and informants (King &

Horrocks, 2010). The interview sessions end with cool-off questions that are straightforward and with appropriate expressions of gratitude (Robson, 2002).

Avoiding bias with probes

As it is possible for qualitative interviewers to impose their own beliefs and reference frames on the informants during the research interview, I have left questions open and used probes to avoid bias during the interviews (Easterby-Smith, Thorpe, & Jackson, 2008). Leaving questions open avoids leading and biased questions that may “contaminate” the response (Wengraf, 2001, p. 163). In addition, open-ended questions allowed me to understand how informants view certain phenomenon without predetermining these views through researcher’s selection of categories (Patton, 2002; Yin, 2012). On the other hand, probing involves techniques such as the basic probe (repeating the initial question), explanatory probe (building on incomplete statements made by the informant by asking questions), focused probes (focusing and pursuing further details on specific information), and mirroring or reflecting (repeating in my own words what the informant has said) (Easterby-Smith et al., 2002; King & Horrocks, 2010; Stewart & Cash, 2006).

Observation and document inspections

I also collected data through making non-participant, non-disguised, natural setting and non-structured observations of the participating organisations. During field research, I have also observed UCO staff members’ interaction and work sites within natural settings (organisations’ offices). I was offered a hot-desk within the organisation when I visited UCOs One and Two, while interviews for UCO Three were carried out in various locations around the organisation (often at the informant’s desk or places that are close to the informant’s office room). This allowed me to “embed” myself into the work environment of these UCO staff and get a feel of the workplace atmosphere.

I have also requested and collected documents. Most of these are confidential to the organisations and the condition of use was to not reproduce these documents anywhere. These include financial reports (for the host university or UCOs where available), company strategic plans, company key performance indicators (KPIs), position description exemplars, staff member KPI exemplars, CEO report to the board, as well as a range of HR documents such as statement of HR mission and objectives, induction material and development review templates. In order to meet with the condition of use, I have drawn on

information provided by these documents without replicating, or quoting word-for-word, any sections.

3.5. Data Analysis

According to Taylor & Bogdan (1998, p. 140), qualitative data analysis is a process of “inductive reasoning, thinking and theorising” rather than “a mechanical or technical process”. Through the creative and dynamic data analysis process, researchers refine and deepen their understanding and interpretation of the subject by drawing on their first-hand experience with the research site and informants. There are three stages of analysis for this research: interim analysis, within-case analysis and cross-case analysis.

Interim analysis

For qualitative case studies, data collection, analysis and reporting are interactive activities by nature (Collis & Hussey, 2009; Eisenhardt, 1989; Merriam, 1988; Taylor & Bogdan, 1998). The process of data collection and analysis are simultaneous, recursive and dynamic. Interim analysis involves processing observer’s comments written after an interview, making notes about what is learned during that interview and deciding what new ideas and themes should be included in the next interview (Bogdan & Biklen, 2003). Carrying out interim analysis and planning each interview according to previous discussions ensures better coverage of information and provides opportunity to follow-up on interesting points. However, although analysis is an on-going process, it becomes more intensive once all the data are collected (Merriam, 1988).

Transcription

I created all interview transcripts in verbatim form and I found this step very beneficial for later data analyses. As Patton (2002) notes, transcribing offers researchers another transition point and an opportunity to immerse in the data again after data collection and before moving into analysis. This helps with generation of insights, especially through “getting a feel for the cumulative data as a whole” (Patton, 2002, p. 441). These transcripts formed a significant portion of the raw data for subsequent analysis.

Within-case analysis

Thematic analysis

As detailed write-ups for each case are important for generating insight (Eisenhardt, 1989), it is essential to pull together a case record that incorporates all information about the case to make them easily retrievable before analysis begins (Merriam, 1988).

There are three key stages for within-case thematic analysis. The first is descriptive coding, which involves reading through each case record (that includes interview transcripts), highlighting relevant material and attaching brief comments. This in turn facilitates definition and description of codes (Merriam, 1988; Miles & Huberman, 1994; Morse & Richards, 2002). Coding allowed me to simplify and focus on particular points and characteristics of the data (Morse & Richards, 2002).

The second stage is interpretive coding, which includes clustering descriptive codes by topic and interpreting the meaning of code groups in relation to research questions and theoretical position (Miles & Huberman, 1994; Morse & Richards, 2002). As its name suggests, during interpretive coding, I considered deeper meanings and implications beyond descriptions and what can readily be seen on the surface. During this stage of within-case analysis, I also compared and contrasted descriptive codes made for different transcripts (informants) and data sources.

The third stage, analytic coding, then derives general themes for the whole data set through considering interpretive themes from both theoretical and practical perspectives of this research (King & Horrocks, 2010; Morse & Richards, 2002; Rowley, 2002). According to King and Horrocks (2010, p. 150) themes are “recurrent and distinctive features of participants’ accounts, characterising particular perceptions and/or experiences, which the researcher sees as relevant to the research question”. Following Merriam’s (1988) guideline, I was certain that the set of themes for each case is complete when there was only a minimum number of unassignable data items and little ambiguity of classification. As part of the analytic coding stage, I also constructed diagram to represent relationships between levels of coding in the analysis (King & Horrocks, 2010; Morse & Richards, 2002).

In particular, for this thesis, the within-case analyses of collected data involved the examination of actual processes through which UCOs’ organisational strategies translated into HR strategies, as well as making comparison between managerial rhetoric/ intentions

and actual managerial actions and HR practices. Taking these intentions and implemented HR practices on board, I then looked for general patterns in the employees' perception of HR practices, HR systems and strategic climates. This allowed me to identify the extent to which employees' perception on the HR practices, HR systems and the strategic climate matched managerial intentions.

Cross-case analysis

The first step of cross-case analysis is the construction of a "meta-matrix", which is a large chart organised by variables of interests to the researcher that contains bits of descriptive information or quotes of a category from each case (Miles & Huberman, 1994). This allowed my analysis to advance to higher levels of abstraction (Merriam, 1988). I then made cross-case comparisons by selecting a number of themes that emerged during the within-case analysis. The ultimate objective of cross-case analysis is to look for and try to explain similarities and differences between the cases in order to gain more sophisticated, structured and diverse understanding of the research topic (Eisenhardt, 1989; Eisenhardt & Graebner, 2007).

In particular, I compared and analysed cross-case similarities and differences in terms of each UCO's strategic objectives, the translation of these strategies into HR intentions, design and implementation of HR architectures, and how UCO employees perceive the HR architectures and the climate of the organisation.

In line with the above logic of analysis, subsequent chapters are set out as follows: Chapters Four, Five and Six provide case description and thematic analysis reflecting each research question for UCO One, UCO Two and UCO Three respectively. Chapter Seven presents cross-case analysis for selected themes and finally, Chapter Eight concludes the thesis by discussing research implications, limitations and possible future research direction.

3.6. Validity

Internal validity and authenticity

Marshall and Rossman (2006) point out that qualitative studies are not replicable or generalisable as the real world changes. The qualitative paradigm, by nature, assumes that the social world is constantly being constructed and thus the notion of replication is inherently problematic. Just as Lincoln and Guba (1985, p. 124) suggest, "local

conditions...make it impossible to generalise. If there is a “true” generalisation, it is that there can be no generalisation”.

In addition, as opposed to quantitative research, which seeks objectivity, the qualitative researcher is the primary data collection and data analysis instrument. While this brings the advantage of being able to immediately respond and adapt to different situations (Merriam, 2002), it also means that the subjectivity, biases, values and personal background of qualitative researchers often shape their interpretations during the research (Creswell, 2009). In this sense, qualitative studies require a different set of criteria and guidelines when it comes to establishing or evaluating research trustworthiness and it will be inappropriate to apply the measures designed for quantitative studies.

As Merriam (1988, p. 120) suggests, for qualitative case studies, “rigor...derives from the researcher’s presence, the nature of the interaction between researcher and participants, the triangulation of data, the interpretation of perceptions, and rich, thick description”. Therefore, in order to effectively and fairly evaluate research validity for qualitative interpretive projects, a different set of criteria will be more appropriate. This research thus adopts the criteria developed by Lincoln and Guba (1985):

- *Credibility*- This deals with the extent to which the inquiry is conducted in a manner that ensures appropriate and accurate identification and description of the research subject. Techniques including engagement, observation and triangulation enhance the credibility of research.
- *Transferability*- As contextual conditions vary by time and place, qualitative interpretive studies can only provide rich and detailed description to assist others interested in transferring the research finding in making judgements of applicability. Triangulation also helps with assessing the usefulness or transferability of one study in other settings (Marshall & Rossman, 2006).
- *Dependability*- This concerns the need for qualitative researchers to consider and identify changes that occur in the research context. Attempts to account for changing conditions in the research topic or subject create refined understanding of the setting and thus enhances research dependability (Marshall & Rossman, 2006).
- *Confirmability*- This criterion refers to the extent to which others can confirm the research findings. Confirmability can be ensured by presenting sufficient detail of the how data was collected and the logic of data analysis

Reflecting the above criteria, this research ensured quality through adhering to multiple procedures as operationalised by Lindgreen & Beverland (2009, p. 11):

Criteria	Operationalisation	Examples from this research
Credibility	<ul style="list-style-type: none"> - Triangulation of data, informants, and methods 	<ul style="list-style-type: none"> - This research investigates three UCOs and made comparisons across them. It collected data from three different sources: interviews, observation and document inspection. In addition, different informants were asked to describe or talk about the same topic or issue, which again enhanced richness and credibility of research findings.
Transferability	<ul style="list-style-type: none"> - Theoretical sampling - Relating findings to wider industry and context to identify boundary conditions 	<ul style="list-style-type: none"> - This research made use of purposive sampling method, which is a non-probability (theoretical) sampling method - This research related HRM findings to wider contextual factors including organisational and university strategies, different stakeholders, industry trends and relevant legislations
Dependability	<ul style="list-style-type: none"> - Asking informants to reflect on current and past practices 	<ul style="list-style-type: none"> - During the interviews, I asked informants to describe both their past experience and explain current HRM activities and practices. The nature of open-ended interview questions and semi-structured interviews often encouraged and allowed informants to bring up their past experience naturally during the course of the interview.
Confirmability	<ul style="list-style-type: none"> - Multiple perspectives on phenomenon of study - Trust between informant and researcher 	<ul style="list-style-type: none"> - I have conducted interviews with at least 20 informants in each organisation. Therefore a range of different individuals described and discussed their HRM experience. These included the perspectives of executive team members, senior staff members, middle managers and individual employees, as well as those from the revenue-generating divisions and support divisions. - I attempted to establish trust between informants and myself by giving clear research background, explaining informant confidentiality and making researcher self-introduction at the beginning of each interview.

Table 3.1: Criteria to ensure quality for qualitative research

3.7. Ethical Issues

For qualitative case studies, it is important to protect the research informants as this research approach examines “a contemporary phenomenon in its real-world context” (Yin, 2014, p. 78). This research protected its informants by ensuring that their privacy and confidentiality are protected, gaining informed consent from all research informants by clearly explaining to them the background and details of this research, as well as formally soliciting the informants’ voluntary participation (cf. Yin, 2014).

This research promised the informants that they will remain anonymous in the reporting of the data. In order to ensure the anonymity of the informants, this thesis does not refer to the informants by their names or position titles, and ensures that informant identity cannot be identified from the reported data. This thesis also leaves the participating UCOs unnamed and refers to the three UCOs as “UCO One”, “UCO Two” and “UCO Three”. While the data collected for this research included company documents, this thesis does not formally cite these documents as the titles of these documents contain the name of the organisations.

This research is assessed by and conducted in adherence to the research guidelines of The University of Auckland Human Participants Ethics Committee. Ethical considerations are most relevant to the interview process in the case studies. Table 3.2 on the next page is a list of ethical issues that have been considered as well as the actions carried out to mitigate these issues.

3.8. Chapter Summary

This research employed a qualitative, interpretivist research paradigm and adopted the multiple case studies research strategy. The research cases were selected based on criteria including quality of research conducted by the university, the presence of a separate HR function in the UCO, and most importantly, site accessibility. A number of actions were also taken to ensure the validity of this research and protection of those who are involved in this research. The next chapter is the first empirical chapter and it presents the research findings for UCO One.

Issues	Actions to address the issues
Consent	Informed consent has been sought from the CEO and/or Deputy CEO of the commercialisation offices. I have obtained the CEOs'/ Deputy CEO's written consent via email. A brief introduction to the research is made to the participants when they are first approached. A hard copy of the PIS is also given to the informants before every interview.
Voluntary participation and right to withdraw	Staff members from the UCOs were under no pressure to take part in my research and could choose to not take part in the research, not answer a question, and not be audio-recorded without giving a reason. Participants could request for copies of the transcripts and recording as well as request for changing or removing any of their data until 31 st December 2012.
Employee protection	<p>The consent form for Directors and Managers and participant information sheet included an item which assures that employees' participation or non-participation will not affect their employment.</p> <p>In order to ensure anonymity, names and identification of informants were not used or referred to in reports of my thesis.</p>
Confidentiality	Participants remained anonymous and participating organisations remained unnamed in the reporting of the data. I, as the researcher, was the only person conducting interviews and creating transcriptions of interviews. Recordings have not been passed on to anyone else for transcription.
Data retention, storage and destruction	<p>Collected data will be kept for up to six years for further development of the research for future publication. Only my supervisors and I will have access to the data. After six years the data will be destroyed.</p> <p>Participants may contact me via email or phone and request for results. Results will then be emailed to participants. Participating organisations will be offered a copy of the completed PhD and any subsequent publications.</p>

Table 3.2: Criteria and actions to address ethical issues

CHAPTER FOUR: UCO ONE “THE SERVICE-PROVIDER”

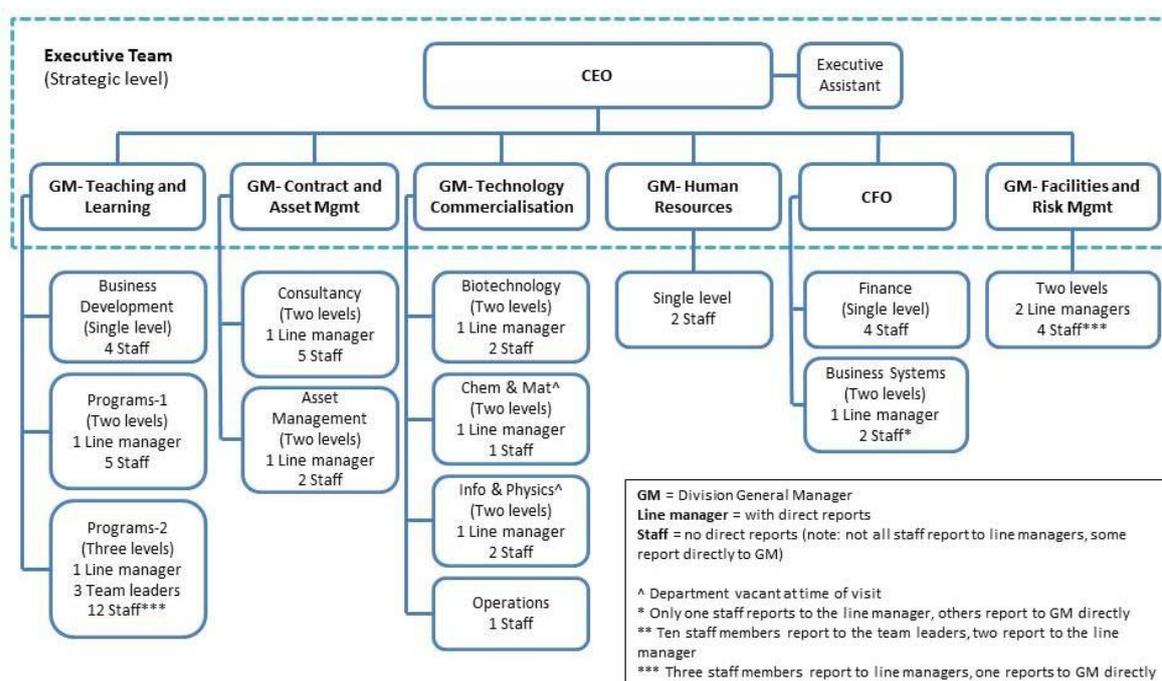
4.1. Organisational History and Structure

UCO One was first established as a consulting firm in early 1990s and it was then transformed into an educational commercial entity (company that handles business-related matters on behalf of the university) in 1998. Since then it has undergone multiple name changes and adopted roles that range from consulting firm for the university, management hub for a private university run by the university, providing consulting and assistant services for the university’s teaching and course design, to managing contracts that academics enter into with industry partners. In 2011, another significant restructuring combined this educational commercial function with another university-owned technology transfer arm (which was first established in 2003). These restructurings were top-down decisions made by the board and resulted in what is now a comprehensive university commercialisation entity.

The company is governed by a board that consists of four senior executive members from the university, the chief executive officer (CEO) and chief financial officer (CFO) of the UCO, and one external commercial advisor. At the operational level, the organisation is managed by an executive team that consists of six members, with general managers (GMs) of the six organisational divisions reporting directly to the CEO (see Figure 4.1). The formation of this team in early 2012 created a forum for strategic discussion among senior-level staff members. The executive team discusses and formulates the organisation’s strategy. However, it is mainly the board that determines the roles and mission of the UCO.

The organisation spreads across two campuses. Most divisions, excluding the technology transfer division, are based at a suburban campus. The technology transfer division is based at the main university campus. As some staff members (especially those from the support divisions) need to travel between the two sites, the university-based site has recently prepared a number of ‘hot desks’ for these commuters. The HR function of this UCO also looks after a conservation centre and a medical centre that are not on campus. However this minor geographical dispersal has little impact on this UCO’s HR activities.

Figure 4.1: Organisation chart for UCO One



There were 62 staff members at the time of the field visit and three quarters of the staff members (mostly those who do not belong to the technology transfer function) are on collective agreements. The male to female ratio is 1:3, yet this ratio is 4:3 at the executive level.

This organisation adopts a divisional structure, separating the organisation into three revenue-generating divisions and three supporting divisions. The three revenue-generating divisions are roughly equal in revenue (Interview 24). The sections below briefly outline the roles of each division:

Commercial service delivery (revenue-generating) divisions

- **Teaching and Learning Commercialisation:** delivers teaching and learning services to the university by running courses on top of the standard university courses and facilitating course development for the faculties on a consulting basis. It also provides consulting services for external partners who wish to work with the university's commercial and educational teaching resources.
- **Contract and Asset Management:** Two groups combined to form this division during the 2012 organisation restructuring. This division looks after IP management, technology licence, consulting and commercial research services contracts.

- ***Technology Transfer:*** focuses on identifying and transferring technology that arises from research undertaken at the university through licensing of technology and establishing start-up companies. This is the smallest division of the organisation due to a stream of resignations during the first half of 2012. There were four members at the time of the field visit and a number of vacancies waiting to be filled.

In 2012, the company placed one of its employees in one of the university's largest faculties. In this way, the company is hoping to serve better and understand the university's needs, drive changes that will improve the faculty's commercialisation performance, as well as facilitate communication between the faculty and the UCO.

Corporate support divisions

- ***Human Resources:*** assists with issues ranging from occupational health and safety, building culture and engagement, governance, risk and compliance, performance and capability, reward and recognition, learning and development, attraction and retention and keeping employee records.
- ***Finance:*** looks after the company's financial matters, payroll and business systems operations.
- ***Facilities and Risk Management:*** provides site maintenance and IT systems support for the organisation.

4.2. From commercialisation strategy to HR strategy

4.2.1. Organisational strategy

This organisation's strategy places strong focus on providing commercial services to the university. According to one senior member, traditionally, this university and its academics were somewhat resistant to the idea of commercialisation (Interview 9). However, as this university started to realise that it is short of income (due to changes in government funding), it began to orient more towards commercialisation and activities that help to improve cost efficiency. Therefore the key driver of the organisation's strategy at present is to help the university produce better economic bottom line:

“Right now the strategy of this company is to respond appropriately to support the university in projects, ensuring our focus of work is not spending more money, but helping the faculties work out what's strategic to them...You do it by stopping the

bleeding, by them charge properly, by actually closing things, and do it by building business” (Interview 9)

This company evaluates its performance by assessing whether it achieved its KPIs and objectives outlined in the business plan. These KPIs and objectives reflect the outcomes that the university wants from the company, and include providing services to enhance faculties’ financial capacity and quality of teaching, help establish spin-out companies and assist with invention disclosures. Financial figures are not part of this organisation’s performance measurements (the company may even be budgeted to lose a certain amount of money) as the key role of the company is to explicitly use its structure to provide commercial assistance to the university.

“The university can’t direct the company to lose money. However it can direct the company to use its assets to provide service to the university, which is the loss you saw on our financial report. It was the budgeted, agreed outcome that we were to achieve... We achieved all the outcomes the university wanted” (Interview 9)

Although the university is committed to transferring technology, this activity itself does not generate much revenue. Therefore, the performance of technology transfer is measured by the service provided rather than the income generated. However, having a strategy that is subject to what the university requires at different points in time also means that the organisation does not have a clear and consistent agenda, nor an understanding of what success means for the organisation (Interviews 7 and 9).

4.2.2. Key organisational challenges

The university strongly influences this organisation. This UCO’s missions and strategies are directed by the university executives, yet existing university structures and policies do not provide strong support for the UCO’s functions (Interviews 3, 9, 20 and 24).

First, in terms of the consulting and contract research activities that the company is working on, there is no clear policy on how university academics should cooperate with this organisation. There is competition between university research office and this organisation. Some university members also seem to misunderstand how this UCO works or they do not even know of the existence of this organisation (Interview 21).

“... right now there seems to be competition between us (and the Research Office), rather than collaboration. I don’t understand how that’s happened, but it’s definitely emerged where the Research Office tells academics “no, don’t work through the company”. They do it themselves, they don’t cost it right, they don’t

scope it right, they enter a contract, which they then breach because they've got no project management support and then the university gets sued" (Interview 9)

Second, although the university now wants to see the UCO generating more financial returns for the university (from the university's research outputs), it does not regulate how academics work with the UCO. In addition, the management structure of the university adds to the ambiguity and complexity of commercialisation processes.

"[Name of another UCO] is quite successful...because, in a way, the university is told that they have to use these people, whereas here, it's a bit optional. You get heads of departments saying "If you work on external executive things, you're not allowed to teach". They see it as a trade-off" (Interview 20)

"The university wants us to produce better commercial returns on everything, but will not force the academic staff to use our services...So we have to spend a lot of time convincing people to work with us, which wastes our time and money, and once we teach people how to do it, they go off and do it themselves...the university won't be tough enough to actually set some basic framework that provides a simple approach...we have an IP statute, the rules are very clear, but there seems to be ways that people can waiver. The deans can change the rules. I know that there should be flexibility. However the flexibility moves too far down the organisation, and that's the ambiguity" (Interview 9)

Third, being at the interface between two very distinct environments (academia and commercial) makes relationship or trust-building a key challenge for this company.

"We (the company) have always been perceived as a bit on the outside to the academics, and not the university...it takes you quite a while to build that credibility and those relationships and those connections. Academic staff who we have to interface with, they are around for the long-haul and they discount you if you're in and out and not stable and consistent...So they won't invest in the relationship...the relationship management side of it is really challenging and it takes a certain type of person to be able to tolerate it" (Interview 24)

4.2.3. Human Resource Strategy

The key HR objective has always been in support of company strategy, yet HR was more reactive and administrative prior to 2012. In the past, there was a period of time when HR was not a separate division and was part of Corporate Services (a division that no longer exists). Subsequently, as the company grew, more structure has been put into place and HR started taking on more responsibilities. At the beginning of 2012, the position of HR executive (General Manager of HR) was created and included in the executive team, indicating the company's intention to take its HR function to a more proactive and strategic level.

“I think in the past HR here has been a bit more procedural. It’s been very recruitment-based. It’s been very administrative-based...I don’t think, up until the start of this year, this company really looked long-term at resourcing, salary review process, performance management, restructuring...I think in the past the HR strategy was just “make sure we employ people and make sure we pay people”, which is fine for the time, but has got to change in the future” (Interview 27)

The overarching HR strategy is to support organisational strategy. The HR strategic goal is to ensure that the company has the required human talents, abilities, motivation and opportunities to achieve corporate goals and mission. Currently, there is a number of objectives that the HR team is trying to achieve, including creating employee value propositions, enhancing internal communications, establishing and ensuring good values and behaviours, and drawing clear connections between the strategic intent of the business and individual KPIs. It is also an HR objective to start moving more HR responsibilities to line managers, so that HR could play more of an advisory role. As the HR strategy mainly depends on company strategy and objectives, it needs to be changed and updated consistently:

“Ultimately, the HR strategy, as I understand it, needs to tie into what we’re required to do for the university. The CEO, with our board, sets the strategy for the company, and that strategy can change from year to year or every month or every six months, whatever the case might be. We need to make sure that we have the people to deliver on those strategies” (Interview 23)

The board members are not interested in HR discussions and direction and do not request HR briefings in the board meetings. At present the HR executive is the main person driving and refining the HR strategy. The HR executive, who has a commercial background and is new to the academic environment, draws up the HR strategy and communicates this strategy to the executive team members. The executive team then provides feedback on its plausibility and gives suggestions (Interview 9).

Intended climate and culture

Due to all the changes and restructuring, at this stage, the strategic intention of the company places a stronger focus on aligning internal consistency rather than on customer-facing behaviour. Currently the organisation is trying to achieve an integrated workplace and better alignment with the university through both the corporate restructuring and HRM initiatives.

- **Harmonious, “one culture” workplace and teamwork:** by reinforcing communication and teamwork, the strategic level hopes to integrate better the technology transfer arm and teaching and learning services arm. Initiatives implemented (or will soon be implemented) include increased level of news or information sharing (via email) and integrating different teams by moving them into the same office space and further restructuring (Interview 9).

“We’re trying to create one culture as much as possible, as opposed to two or three distinct ones. We’re trying to have a culture which is high on communication, people are aware of how the business is going, hopefully creating an engaged organisation...We’re trying to come up with a structure which suits the business, which is the most organised, efficient way to do it, and HR plays a role (in it)” (Interview 2)

Staff members also suggest that the strategic level is focusing on enhancing communication and teamwork in order to create “one culture”:

“I think it’s quite a unified culture they are developing. It has some way to go...The history of the place is the two major operations were two separate companies, and under separate leadership, particularly on a daily basis they are physically not co-located...Virtually everything that is done, particular at the HR level, is about further unifying the company” (Interview 18)

“(HR intentions)...build a really strong team who are very aware of where we sit in the university and what they want us to do...but it’s always about team work” (Interview 21)

Reflecting the strategic level’s intention from a wider perspective, some informants mention that the executives are trying to make sure that a happy work environment where everyone respects each other is created:

“They are trying to create a culture where people respect one another...It is just trying to embody those values within the company and make sure that it contributes overall to a happy working environment” (Interview 6)

“Company culture...it’s always been a very friendly place, from what I have seen of it...It is very much a cooperative type environment...It’s always been very good” (Interview 10)

- **Better alignment with faculty and the university:** The staff members are also aware of the strategic level’s intention to improve work alignment with university faculties:

“Probably the key one is more clearly aligning...rewarding people who are aligned to the broader university’s intent, faculty intent, perhaps less so than simply doing

what the tech transfer team might try to achieve...more clearly articulating or understanding what the faculty's intentions are and by directly engaging with them so that there's conversations regularly" (Interview 7)

On the other hand, three informants suggest that they are unaware of, or have never thought about, the type of culture in the company. For example:

"I don't really know...sometimes I stay in my little pigeon hole in my office...and I think sometimes I probably don't interact enough with people out there to know what's the big picture" (Interview 16)

"I have no idea...I don't know if there is any HR policies in place...if they are, I haven't seen any...there's no learning and development or performance management process this year" (Interview 26)

Company values and encouraged behaviours

In line with the above intentions, the company introduced a set of values and behaviours in 2011 and embedded them in the performance review process:

"The values and behaviours were introduced very well last year, they now play a role in our performance management. We now measure people against that. The values and behaviours we've got are trying to create a performance culture... There's a number of values we've got around communication, around teamwork, around accountability" (Interview 2)

According to the company intranet, the values and behaviours include: *honesty and integrity; respect; customer focused; commitment; teamwork; and recognition*. The company has tried different ways to reinforce these values, including incorporating them in position descriptions and HR presentations for new staff members, advertisements on intranet or through email, whole-company meetings, inviting speakers from the university (to give a talk on themes relating to these values), promoting them through certain themes (e.g. coffee mugs saying "we are brewing our values and behaviours"), as well as recognising staff members whose performance reflected these values (Interviews 15, 16, 18 and 23). However, despite the company's efforts, although some informants can name a few values off the top of their heads, others cannot remember any of them. For example, informants say:

"There's no bullying, you have to be nice to each other...it's common sense, you wouldn't do those things anyway, regardless" (Interview 5)

"We've got some values...but I don't even know what they are anymore" (Interview 12)

“...but I have to say I forget about most of them (the values and behaviours), so are they reinforced enough? I don’t know” (Interview 16)

Informants suggest a few possibilities why it is difficult to recall company values. First, although it is good to have values in place, people do not necessarily think about these often (Interview 15). Second, the restructuring has made company values less of a priority (Interview 14). Third, the values are too general, too “internal-focused” and could apply to any company (Interview 20). In comparison to reminding staff members what the values are, one informant thinks it will make more sense for the company to establish good systems and processes in place that can objectively and professionally assess whether employees’ behaviour reflect these values:

“I think you can have organisational values, but unless you have good systems and processes in place, like performance development and review, appraisal, you can’t manage that anyway, so it becomes subjective. So the first step in our process is to setup the structure and the framework for those (value) assessments to be objective and transparent” (Interview 24)

One informant feels that the decisions made by the management of the company do not reflect these values. However, note that the negativity of this informant’s perception stems from misunderstanding over dismissal-related issues (see section 4.3.2. “Retention Challenges”):

“(The performance objectives) are sort of decided by the managers, and then they assess you on that. They came up with company values about a year ago and they’ve been ramming them down our throats...but then everything I see management do, whether the restructure or whatever, they break all of the values and they don’t even realise. So I’m right over that...Things like respect and recognition...when they retrenched staff they just handle them really badly and I don’t think that’s respecting your staff” (Interview 17)

4.3. HR architecture and efficacy

4.3.1. Knowledge, skills and abilities domain

- **Recruitment**

HR Planning

There is not a formal needs analysis procedure and new positions are created on a case-by-case basis. The company is currently in the process of formalising position descriptions. Therefore some staff members do not have a proper position description yet:

“They haven’t even given me a proper position description. They asked me to mark mine up after the restructure and it still hasn’t come back to me. I’m losing interest really fast. I never used to be like that. I used to do things properly, now I’m just waiting for them to get themselves sorted” (Interview 17)

One long-serving informant describes her employment experience in this organisation. Although a rather unusual case, it reflects the lack of sufficient HR planning at the organisation’s current stage. This employee is constantly called on to solve issues, take on extra responsibility and her role has changed numerous times, in some cases against her will:

“Just seemed whenever (they) had a problem, (they) came to me and said “You need to fix this”. I have to admit, I got a bit frustrated with that, because it always meant that I ended up with two jobs instead of one...Every time I got these different jobs I was working way too much over time that is never paid” (Interview 17)

This informant suggests that by asking the same person to help with additional tasks, the learning and development of other staff members can be limited:

“I think what can be dangerous is, instead of asking around or checking around who could do something, they keep going back to the same people that they know are willing to try anything. That is a bit of a trap because...other people weren’t building their knowledge” (Interview 17)

Talent management

As part of the move to take HR to a more strategic level, the HR executive launched a talent management project mid-2012, where executive team members, together, look at the performance and potential for each of the staff members against a three-by-three matrix (high, medium or low for potential versus performance). This activity should “lead on to thinking strategically about future recruitment and training and development of staff” (Interview 22).

As for the first talent assessment, most staff members are placed in the middle. However, one executive team member points out that it is too early to begin the talent management project, as restructuring has just taken place, staff members are yet to settle down and new employees are yet to settle in.

“It’s probably unreasonable for me to (judge some staff members’ potential), because I don’t feel that some of them have been in a situation where they’ve been given the opportunity to actually show what their strengths actually are” (Interview 24)

Recruitment channels

This company makes use of several different recruitment channels, including recruiting through the existing pool of temporary or casual employees, networking (word of mouth), recruitment agencies (which may also place advertisements on the internet) and direct advertisements. Decisions on the recruitment channel mostly depend on the role and HR capacity at the time.

“The specialist people we’ll recruit through an agency. The lower level people we’ll go on SEEK...what we deal with is whether our resourcing has the capacity to deal with SEEK and getting 500 applications, and the other is actually finding (the right) people” (Interview 9)

According to an executive team member, around a third of the company’s vacancies are filled through networking or word of mouth. A number of informants also suggest that they had contacts in the company who told them about the vacancy. However, the referred applicant is not privileged and still has to go through the same selection process as every other applicant (Interview 13).

“We’ve got...direct contact of people we’re aware who might be interested. As you might know, tech transfer is a fairly small field, so if you don’t know them personally, somebody around you might know the people who might be of interest to us” (Interview 7)

- **Selection**

There is not a standard selection procedure, yet every informant report having gone through at least one interview and are aware of reference checks. When recruitment agencies are not involved, the selection phases start with short-listing:

Short-listing: HR does the first round of short-listing. Then the line manager will do the second round of short-listing to select those to be interviewed. The number of applicants selected for interview varies, but the organisation has the capacity to interview up to ten candidates (Interviews 8, 10 and 11).

Interview(s): Interview is the main way through which selection is made. There may be one or two interviews, depending on the case and role (Interviews 14, 15, 20 and 22). Candidates are often interviewed by the HR manager, the line manager and sometimes people from the team that they work with once selected. For more senior positions, the CEO and the HR executive may be involved in the interview process. Interview questions mostly focus on the candidate’s personality and past experiences (Interviews 10, 16 and 21).

As there is usually no testing process, the selection panel will try to find out if the candidate is technically capable for the position:

“(I didn’t have to do) hands-on test, but it was a series of questions to determine whether I had the technical knowledge required to fulfil the position. I have got a relevant qualification...” (Interview 10)

Candidates who are overseas can be interviewed via Skype and the company may ask the candidate to fly in for an interview (the company will pay for half of the cost).

Testing: Only two informants describe that they had experienced this phase. One informant provided work samples while the other did an Excel test.

Reference check: Reference checking is a standard selection procedure, where the company contacts a few of the candidate’s referees. This is usually carried out as the final selection phase (Interviews 15, 22 and 23).

Selection criteria

Selection criteria vary significantly for different divisions. In general, the teaching and learning commercialisation division and the contract and asset management division value the candidate’s previous, relevant work experience more than qualifications, whereas the technology transfer division places strong emphasis on both qualifications (ideally a PhD in the relevant work area) and previous exposure to the public sector environment. In all cases, the company looks for people who already have (at least some) work experience and those who will “fit” well with the organisation’s culture.

“People who are in our technology commercialisation area...are always degree qualified and it is highly likely that they are PhD qualified in the specialist area they’ve got...In the consulting area you have a combination of people with some legal qualification, sometimes not. In [the teaching and learning division], it’s not as common. It helps if they do, being in an academic organisation, but it’s not as much of a prerequisite as it tends to be in our technology commercialisation area” (Interview 27)

“Generally speaking...the people (this company) hire fit-in really well with the culture that we have here. If they don’t fit in well with the culture they don’t last very long” (Interview 21)

In the past, the selection criteria tend to identify candidates who are rather similar (for each division). For example, there is one particular division that had team members who “come from the same background...are of one gender within one age bracket” (Interview 27). Having realised this bias, the company has taken the 2012 restructuring project and re-

staffing process to increase the company's diversity by hiring people with different backgrounds.

In terms of recruitment/ selection responsibility, there are variations across the company in line managers' HR involvement. This reflects the difference in HR "readiness" of the managers. Some managers are involved in, or even initiate, the recruitment and selection of their direct reports, while other managers or team leaders are not yet involved in selection of their new team members:

"At the moment HR does a lot of recruitment on behalf of the line, and that's probably because a lot of the line managers aren't ready for that, yet there are some things that the line should do more of and HR should do less of" (Interview 1)

Challenges

One of the main recruitment and selection challenges in a UCO setting is to find "all-rounders" who have the perfect mix of technical expertise and commercial skills (or leadership capacity), and can also work well in an academic environment. This challenge is found in all divisions, although it is much greater for the technology transfer division, especially for senior positions. A single technology transfer vacancy can take up to four months to fill.

"...in technology commercialisation, you need to be somebody who is technically qualified enough to sit with the researcher and understand what the researcher is actually coming up with, and what it technically means, and at the same time you need to be commercially skilled enough to sit with a venture capitalist or a company and explain to them why they should invest serious amount of money in this, or present them with a business plan. It's an interesting mix. A classic person I suppose is a PhD with a MBA...those people are hard to find and they are hard to find doing tech transfer and commercial research. If they've got that sort of staff, they tend to be in other roles. We find a lot of people with PhDs, but who don't understand the commercial part. We find people with commercial experience who really wouldn't be able to handle themselves with a researcher" (Interview 27)

The requirement for a specific skill mix is not only a problem seen in the technology transfer division, but also other divisions. For contracts and asset management roles, the ideal candidate needs to have both a legal background and financial knowledge. For teaching and learning commercialisation roles, the ideal candidate needs to have both commercial skills as well as "the capacity to work in that educational setting in a stakeholder-sensitive way" (Interview 24).

- **Training**

This organisation makes use of a six-month probation period; nevertheless new employees all go through a general company induction program when they first join. The induction usually involves learning about the company's general HR and financial procedures, policies, organisational health and safety (OH&S), databases, IT systems and looking at the intranet. The new staff member spends time with each division and receives a manual.

However, the induction program was not standard in the past, as some informants suggest that it was their direct manager who was in charge of their induction, while others (who are not members of the HR division) report that the HR manager looked after their induction. There are also a few staff members who never received a formal induction program, usually due to special individual circumstances. Perhaps because of the lack of a systematic induction program, formal induction becomes more difficult when many new employees join at around the same time.

“(The induction) seemed to depend on who’s your manager, who’s doing your training. It could be appalling induction, or you could have a really good induction. It’s not formal or anything” (Interview 17)

As part of the new HR initiatives introduced in 2012, better planning and guidelines were put into place for induction. An induction plan for a new staff member who joined in May 2012 clearly outlines a four-day schedule, which lists who the new member should meet at what time and for what purpose.

Most informants say that they received on-the-job training in terms of role or task-specific training; sometimes this will be carried out with the aid of role-specific manuals. The direct manager or the person who was on the position previously (but may be leaving or moving to a higher position) usually looks after the new member's job-specific training. However, because of the nature of on-the-job training, there is not a clear allocation of responsibility. At times this means that the company relies on proactive and organised staff members to take up the job without putting in place any formal regulations.

“Training is always on-the-job...They rely on the same people who are organised, proactive and structured. They rely on those people to teach other people, but they don’t give those proactive people any sort of support to formalise that and roll it across all teams...and we’re a university, which I think is absurd” (Interview 17)

“Generally it depends on what (sort of training) it is...A lot of it is hands-on training that is specific to the job and that’s usually done by myself or one of their colleagues” (Interview 19)

There are some divisions that do not have any manual, which makes training for someone who is backfilling a challenge because every business development manager works differently.

“That was one of the things that was a bit difficult that I found, because each of the BDs have their own way of doing things...especially in the mind-set of someone who was filling-in, backfilling a position, it’s quite a different way to come to a job than if you’re being given a job” (Interview 20)

Other than the new learning and teaching commercialisation team leaders, who were promoted in 2012, other informants who have experienced internal movement suggest that they did not receive any particular training after shifting positions internally. However, the new learning and teaching commercialisation team leaders feel rather supported when they began their new positions, reflecting the effectiveness of HR reforms in 2012.

- **Development**

Informants confirm that employees have a training needs discussion with their direct manager during the performance development review’s goal-setting process (see section 4.3.2.), and that these discussions should lead to relevant development programs or initiatives.

“Normally you sit down with your manager, and you’ll discuss areas that you would like to improve on, or maybe areas that are identified and you should improve on, and that works into a development plan” (Interview 6)

“Some training programs are specific to an individual’s needs to develop them in certain areas...there are other trainings that are more team-based trainings...Certainly I as the manager look at each of my team members’ requirements and I discuss with them what training would they like” (Interview 23)

In some cases, these discussions will directly translate into development program attendance (usually more technical programs such as software courses). However, in most cases there is not a clear link between these discussions and whether they are translated into actual development opportunities. Whether these discussions actually take place also varies across different departments. For example, one manager suggests that their team members are too busy to think of and nominate development courses that they want to

attend (Interview 22). While development does take place, it is usually ad hoc and its decision-making process can vary from time to time.

There is a large number of whole-company development programs on general topics in comparison to job-specific team or individual development courses. However, these are not necessarily linked to performance appraisal and are coordinated by the HR team (Interview 4). These include mandatory programs such as environmental health and safety training, as well as activities such as visiting a recycling centre, communication skills courses and emotional intelligence programs (Interviews 14, 16, 22 and 25). These general whole-company development programs reflect the strategic level's intentions to integrate and better align different organisational divisions after the restructurings and create a positive work environment, yet employees' account do not demonstrate an understanding of this intention. While most staff members do not mind attending these activities, they do not find them necessary:

"...the emotional intelligence program, that's very intangible to know what the benefits of it are. I go through a program like that thinking "this is all good, I'd like to think that I do this anyway"...so, am I a different person when I come out the other side of it?...it is really hard for me to judge" (Interview 4)

A few informants find these generic development occasions a waste of time or "weird" (Interview 26), especially when there is not a feedback system that reviews the effect of these programs:

"I've been to about five different (team building seminars), and it's all that sort of warm and fuzzy stuff, which only gets you so far- you do it for a day, and you go back to work, and it's never spoken of again. It's a complete waste of money...I think (the managers) think (team building seminars) will fix any problems there might be...there's always different styles of working and there were big problems in the past, so instead of getting ahead of that, they retroactively brought these courses in. They thought it would magically fix everything, but they never revisit them...It just never gets raised again" (Interview 17)

Another informant also points out that it will be more helpful to have development courses that are directly work-relevant, especially with tight budget:

"I think (this company is) quite constrained (in terms of learning and development). I mean, if you have budget responsibilities, I would want to control the training so that it's quite targeted and specific and tied into work" (Interview 24)

Challenges

There are a few challenges surrounding learning and development. First, although HR coordinates development programs, it is up to the line and division managers to have the training discussion with staff members and submit the forms. The integration of performance appraisal with development discussions, as well as company structural changes, add to the challenge:

“I think we have been a little slack with the performance development review framework...a lot of the managers haven’t returned their forms back to HR, and because they haven’t returned it to us, we can’t sit down and say “...let’s work out something”...We had given the managers a deadline, but it’s really hard and I think because of the restructure as well” (Interview 15)

Budget is also a major constraint:

“I wanted to do more training but have not been able to...because we don’t have the money for it” (Interview 25)

Third, workload may hinder staff members from attending development programs:

“I said “If you are going to force me to take up this team, I will have to put this course on hold” ...In the end I did the first one...and I had to drop that (the second course), because I just couldn’t possibly do it” (Interview 17)

Fourth, some staff members may feel that they don’t need further development at all:

“If you’re a PhD person who has a strong commercial background, we sometimes run into issues that those people tend to believe that they don’t need a lot of development, especially when it comes to being a leader or being a manager. There are definitely challenges in getting those people to see that they need to be developed” (Interview 27)

4.3.2. Motivation and effort domain

- **Performance development process**

In the past (prior to 2010), there was not a formal performance management process and measurement of performance was ambiguous. A formal performance management process was implemented only two years ago:

“In the past, performance review hasn’t been done particularly well, and the past performance reviews probably haven’t had good, measurable targets” (Interview 1)

“They never had (performance development reviews) when I first started (working here) though. I’ve only done two, so they come in towards the end of the year kind of thing” (Interview 26)

The HR executive revamped the performance review process again in 2012, so there are now clearer procedures. The new performance development review layout is more concise, the rating system is clearer and values and behaviours are also incorporated in performance appraisals (Interviews 1 and 10).

Performance development (PD) review process

There are three clear and distinct sections in the performance and development (PD) review worksheet that every member of the organisation is supposed to complete: one section for completion at commencement of review period; one for completion at the mid-year review; one for completion at the final review. However, this worksheet has only been introduced at the beginning of 2012. Therefore informants’ description of their PD review experience may not reflect the procedures outlined in this worksheet. According to one manager, the standard PD review process takes place twice per year: March and around July.

“We have a couple of points throughout the year for our performance development, so March is when we write all the position descriptions stuff for that coming year, and included in that is what you did well in the year before, what projects you have been involved in, and...the development things to concentrate on for this coming year. Half way through the year we go through it again, seeing where we are tracking, have you completed all these tasks, if you haven’t, why not...and look at the time frames for it” (Interview 10)

Informants’ descriptions are highly coherent as everyone mentions having a discussion and setting up performance and development objectives for the year with their direct manager. However the timing of goal-setting for the coming year and performance review for the past year (both activities take place at the same time) does not seem to be well-coordinated across the company and varies between December, January and March. This again, seems to be left at the manager’s discretion. During this process, staff members have a discussion with their manager and receive a final rating for the year before and set goals for the following year (Interviews 6 and 10).

The performance review process is a consultative exercise for most people:

“We do the (performance) rating together...When we sit down, we go through it question by question, and then we agree on a rating. That could be a combination

of me giving them a rating and see what they think about it, or them saying “this is how I think of myself” and I agree...it’s a discussion, and if I give them less than that, they know why, and we agree on the spot before we move onto the next question” (Interview 23)

Some may just receive a rating decided by the manager:

“The manager gives you a rating” (Interview 26)

Again, this process depends on the manager’s preference.

Although it is part of the formal procedure, mid-year reviews are not strongly enforced. This again demonstrates the lack of formal procedures prior to 2012 and that most departments are yet to pick up the new PD review process. Managers can choose to have monthly or a mid-year discussion or only a formal annual discussion with their direct reports:

“We have the (performance management) meeting with our manager once per year. We don’t have any follow-up meetings...We do everything annually, so about March” (Interview 25)

“I used to schedule formal meetings (with my direct report) in once a month. Not so formal going through performance review, but once a month catch-up, almost like there’s no paper, just for discussion...but now I don’t, because we are in the same room. We catch-up every five minutes” (Interview 12)

“My manager did do the six months one, even though (performance management) is based annually. At six months we would review, are we up to date, are we up to place...” (Interview 16)

The HR division plays a key role in developing performance development review processes and documents. The HR executive and HR manager look after the implementation of performance development review process. However, it is up to direct managers to carry out the procedures and activities (note: this is not yet the case for new team leaders who are recently promoted).

“We (the HR division) always encourage the direct managers to do a lot of that stuff, so we give them tips and guidance on how they should do it. We don’t actually sit there and do it with them. The HR team develops the performance review process and forms” (Interview 15)

Measurements of staff performance

There are three parts to the performance measurement criteria: goals and objectives (which are to be set with the SMART statements in mind, which are specific, measurable, agreed, realistic and time-bound), responsibilities of the position, and organisational values and

behaviours. The first part, goals and objectives, has a mix of team and individual objectives. The second and third parts only include individual objectives. Team objectives are around performance targets and growth (for revenue-generating divisions), whereas individual objectives are around behaviour and development:

“Generally I have group targets (for performance appraisal)...there are some individual things that are more behaviourally-driven, but the ones that actually matter are about growth (on the group portfolio)” (Interview 30)

Apart from manager grading, some behavioural performance can be measured via feedback:

“It’s the feedback that we get on an anecdotal basis from the clients. We run a survey once a year of our clients, just to see that our services are (good)” (Interview 22)

Challenges

One informant, in particular, discussed that it is hard to determine employee performance without first defining what exactly “good performance” is in the performance development process:

“...what does a good job look like...I don’t know...It’s not the job descriptions...Again, who are the top performers? It’s difficult to put your finger on them right now. I think, cynically, it would be a mistake to identify people as top performers without really having transparent processes around what constitutes top performance. Otherwise it’s that thing with subjectivity and favourites, which is something I’m really trying to make not happen” (Interview 24)

Another issue, which is already reflected in section 4.3.1., is the lack of coherence, especially with training and development, in the way in which performance reviews are performed:

“I don’t think a lot of that stuff (performance development reviews) has been followed up. I don’t know what’s in there, as it hasn’t been linked in a systematic way” (Interview 24)

Without clear and formal procedures that translate performance development discussion outcomes into actual development activities (an issue discussed in section 4.3.1.), one informant doubts whether setting objectives is important at all:

“I think (performance management) is just something to tick off the checklist to say that we’ve done it...It hasn’t been done this year. I don’t know why, but it hasn’t been done. It’s not being communicated. Well I don’t think there’s any point to it, so it’s no point asking for it, because like I said, there’s no training that you can get from it. Even though you ask for it, it doesn’t happen” (Interview 26)

- **Remuneration and incentives**

This UCO's staff members receive a "pure" salary package (plus an additional percentage towards superannuation) and there is currently no bonus system (Interview 7). Although the technology transfer arm used to have a bonus system, this was cancelled when the two entities merged. One informant explains that it is difficult to have a bonus system because work and effort do not directly translate into growth in UCOs:

"It's a difficult business, in some ways, to have a bonus structure in place, because there is a lot that is out of your control. It's not simple linear stuff like a traditional sales role...the timelines are much longer, and there is a lot more people in the decision-making process, rather than just you and your potential (client). That makes it hard to really regulate a bonus structure with any great regard and efficiency" (Interview 18)

In the past, remuneration was not associated with performance (Interview 17) and the performance review has only been linked to remuneration (pay rise) in 2011. The company also started benchmarking staff members' salary against market data in 2011:

"(Performance review) wasn't (tied to remuneration and rewards) in the past...the salary review process was disconnected with the performance review process. So how you performed really didn't judge what pay increase you got...the salary review process was changed so that it was more performance-based...Firstly we matched people's salary increases (related) to how they were performing, and also we compared people's salary increases to how much they are being paid in comparison to the market..." (Interview 27)

Now there is a more formal remuneration revision process, which has a number of clear criteria and requires GMs and managers to make recommendations, and then, with the support of HR and the CFO, the CEO makes the final call on annual remuneration adjustments.

"Pay reviews will be decided upon a number of things: our capacity to pay, what the market is telling us, how people are performing...In the past, those things weren't taken into account...people just said "look, I think we should just give everybody the same pay increase" (Interview 27)

"As long as it is not wildly outside budget, HR will generally be comfortable with it, and I guess it's bringing to the CEO the whole picture but also any outliers that need to be addressed and anything that dramatically affect budget" (Interview 18)

Pay increase

The general employee consensus is that performance appraisal rating is related to pay increase. Some people are able to articulate clearly the linkage. For example:

“What will happen is the company has a budget that they have allocated to the bucket of pay rise. Every division will have their own bucket and when you have your performance appraisal with your manager, there’s your ranking system that measures your performance and a whole heap of other criteria. Your manager will recommend a pay rise based on A- the bucket and B- your performance and all the other” (Interview 6)

...While others only know that there is a link, but they don’t know exactly how it links:

“Yes. I guess sometimes I question how much performance appraisal actually has to do with remuneration. I guess overall it should do...but yes I do understand that it is it. The more you put out, the more you should be remunerated and looked at and so forth” (Interview 16)

There are also people who are unsure whether it is linked, or believe that it is not formally or properly linked:

“The manager gives you a rating, but because nothing happens with it, there’s no point...and the first time we did it, it wasn’t even related to remuneration. Apparently it was (related) last year, but it was done very weirdly, so I don’t agree that it was” (Interview 26)

“Essentially yes, but I don’t know this year. They say the remuneration is not directly linked to performance review. I don’t know how that’s entirely possible” (Interview 12)

Such confusion may stem from the lack of mechanisms that ensure effective top-down information dissemination. One informant mentions that once discussed and confirmed by the executive team, salary review decisions should then be communicated to individual staff members via their direct manager:

“I didn’t try to hide at all how people would do (the salary review). The problem is that it is the managers’ responsibility to pass on to people why people get the increases they do. I can’t be in every salary review discussion. I have the trust the managers to give that information” (Interview 27)

This reflects issues with vertical communication in the organisation. It is possible that some messages will become lost in translation from the top to bottom. The section “Vertical communication” at 4.3.3 further discusses this issue.

Challenges

A few informants believe that rewards and remuneration is an area that requires more attention. There needs to be clearer association between good performance and rewards and clearer recognition of top performers:

“(Will top performance be rewarded)...no, and that’s one area where I think we could do better...I think the salary increase system that we have...one would hope that they could see a financial reward with their pay increase associated with the way they have performed their work ...it’s probably not as direct as someone getting a bonus or something” (Interview 22)

While there had been instances where other rewards (such as movie tickets) were given, these are usually ad hoc and there is a lack of consistent, formal structure:

“The thing that came out the strongest that needed attention by the company was recognition and remuneration...They did things like movie tickets...Simple stuff like that. Again that’s ad hoc. It seems to have disappeared a little bit. They grab something, and they seemed to be able to hold on to it for three months and then it just falls away” (Interview 17)

Without an effective rewards program, it will be difficult to retain good staff:

“Remuneration is ultimately set by the university, because university says “here’s a bunch of money” and everything we do needs to be done within the scope of that money they’ve given us. So there is a capacity to pay, and a situation where you’d like to pay more, but you just can’t...That can result in losing people. That’s a challenge, particularly for HR” (Interview 18)

There are also issues with allocation of performance development review responsibilities, perhaps a one-off case due to the restructuring. One informant describes how it was her manager’s manager, who does not know how she worked, who decided her salary increase. This again shows how company changes and restructuring bring HR challenges:

“It’s very weird...Some people got an increase, but not all. I think it varied between zero percent and four percent...I don’t get it. It wasn’t my manager who did it. It was her manager, who we didn’t report directly to, so I don’t understand how she knows how we operate or work” (Interview 26)

- **Employee motivation**

Most informants suggest that they are motivated on their job because there is a lot of autonomy or they really enjoy their roles. Financial rewards appears to be less important and do not seem to drive motivation.

“I’m reasonably self-motivated to come along and do my job, and take home my salary. That’s a reward for me. The job is interesting and diverse, so that provides a fair bit of satisfaction” (Interview 4)

“...the motivation should be the satisfaction of commercialising some technology...just being proud of achievements” (Interview 8)

A manager suggests that she motivates her team members through recognition:

“Our team works very closely together and they help each other out...they work so well together that it makes my job easy to motivate them. (Motivation is) mainly through recognition” (Interview 19)

However, one informant observes that some people around her have lost their motivation, particularly after having experienced numerous changes and restructuring:

“The people that I work closely with...I think they have lost a bit of motivation...I think maybe they have been a little bit past the company now and tired of the company and maybe been here for a long time...seen too many changes and maybe don’t like the way it’s going...You get tired in a role because you have seen too many changes and you don’t know whether you want to be there anymore” (Interview 16)

Career progression opportunities

Most people suggest that there is not a lot of career progression opportunity within the company due to its size and specialisation (Interviews 4, 18 and 26). This is especially the case for more senior positions:

“I suppose it’s partly because it’s a relatively small organisation and also because I’m a specialist...certainly I’m in a very specialised industry...There are not many of my type of position in the whole city” (Interview 4)

“I think there are a number of places in the company where you just reach a natural end point (at your role). Unless you actually make a positive decision to say “Well, I want to try something different in the company”, there is no other way else to progress“...In other parts, such as GMs, that’s probably as far as you can go, unless you’re silly enough to want to be the CEO (laughs)” (Interview 18)

Two informants clearly recognise the importance of career progression opportunities for retention:

“(Internal progression opportunity) is something that we are going to look at next year...I’ve got some real stars in my team and they need that opportunity. We need to retain those staff and that’s really important” (Interview 19)

“...we are too small to provide (many internal opportunities). That is, I suppose, a bigger challenge. We don't have many pathways or opportunities with the functions of the company” (Interview 9)

The company attempted to address this issue through two main approaches. The first is to assign managerial responsibilities by creating new team leader roles, and the second is to evolve staff members' roles by asking them to take up additional responsibilities. However these solutions can only cover a limited proportion of employees.

Currently, the learning and teaching commercialisation division has the most career progression opportunity. New line manager roles are created as part of the company restructuring:

“With the restructure there's a bit more motivation because there is actually a career progression (now), whereas before it's a flat structure, there wasn't a lot of room to move...We're expecting to build another team, maybe next year or something, so there will be another team leader role” (Interview 11)

A few others have also taken on managerial responsibility since joining the company, only not in a structured or formal way (i.e. not going through formal selection process like the learning and teaching team leaders):

“We do have junior positions and general parts of the operations where you can sort of increase in seniority through different positions...things like from administrators to manager. We have project administrators and project managers, which can be a promotion” (Interview 18)

One informant describes taking up additional responsibilities for continued learning:

“I guess the thing with working with a small company that is positive though is when the company changes, we have the opportunity to change with the company. The role I have now, for example wasn't existing when I first joined, but it has developed that way” (Interview 6)

Internal progression process

There does not seem to be a formal policy for internal progression procedure. This is again a case-by-case scenario and does not seem to be relevant to job-type. A number of informants (Interviews 13, 14, 18 and 21) suggest that they had to go through an application and selection process. For example:

“...you needed to complete a selection criteria and also include a cover letter...then there was the interview process, and then after that there was another meeting for them to advise us whether or not (we got the position)...it was very

formal...My understanding was there were eight people who applied for the positions, and there were three positions going” (Interview 13)

While others got “asked” to move to a higher position:

“(Internal selection process) wasn’t opened up for any sort of application. It was more “you’re doing that, and that’s very much related, so I think we’ll just move you there” ...things just more fall into phase” (Interview 12)

One staff member says that the CEO decided who is going to become a general manager during the restructuring:

“I know all the people here quite well and I disagree with the people that they picked. I think they, in some cases, picked the worst possible managers to be head of division. They have very low emotional intelligence. They have no history of managing staff. The person that they put in charge of the largest group was not managing anybody before being put in that position. The CEO decided everything. Maybe she consulted HR, but I don’t know” (Interview 17)

Exodus

Retention challenges

According to most informants, staff turnover has traditionally been quite low. However there was an exodus at the beginning of 2012, especially for the technology transfer division, due to reasons ranging from wanting to move overseas, deciding to try something new, to being unhappy with company restructuring:

“A lot of turnover over at tech commercialisation has been for a variety of different reasons. People wanting to do different things, people wanting to move overseas...but there was a group of people that are unhappy with the way the division was being managed and run, and didn’t feel the integration of (the technology commercialisation arm) into (the company’s current form) was done as well as it could. So I think there is a group of people who probably felt a little disenfranchised and a little disappointed, and they’ve chosen to go elsewhere” (Interview 27)

“It looks like it all happened at once, and it did, but it was all for different reasons...It’s a big change in the organisation, going from an old model, to a new model, and it’s hard in the middle, which is where we are at right now” (Interview 31)

However, one informant suggests that staff turnover is not necessarily a negative phenomenon:

“We’ve got a lot of long-standing employees here. I don’t necessarily see really low turnover as a sign of a strong company. I’ve been in some places before that

had turnover that was virtually nil, no one left, and that was a real problem for the organisation...If we were losing a lot of people because we are paying them badly, or because we're hiring the wrong people, or because they really hated the place, then that will be a problem" (Interview 27)

Part of the reason why many people have left is related to the dismissal of a senior member, who has breached the company's IP ownership policies. The company had gone through a proper, formal dismissal process. Unfortunately due to the confidentiality policy, the company was unable to provide a clear explanation for events to other employees, which caused complaints and resentment among some staff members. One executive member explains:

"It was a breach of trust and it was significant, not a little one...It did unsettle a lot of people, and that's part of the reason (why a number of people) have gone...I could be frank with you with what he did, but I couldn't be frank with others...because he's still in the community...he's still wondering around this university. That's the bad thing about universities. When we (sacked this person), a number of academics asked to meet (us), and they attacked...saying that he was fabulous...I wasn't able to (explain) because I wasn't able to breach confidentiality to actually tell them what he's done" (Interview 31)

Similarly, another manager was dismissed due to workplace misbehaviour, yet the company executives were again unable to clarify the reasons:

"It became clear that she was bullying staff...using credit card inappropriately...It took me a long time to see that it was happening, because she was working straight to me, she wouldn't let me see any of these people. I began to get feedback...not direct feedback, but people will go "I'm not really sure what she was saying" and little hints. She kept my information and people below would fear to talk to me, and I realise I have a really dangerous person" (Interview 31)

One informant, in particular, expressed discontent and feels this manager's dismissal is unfair because staff members do not know why the manager was dismissed.

"I don't know if that was a personality conflict or what. She was the only one retrenched in the restructure, which was a bit weird...She was doing a good job with getting it quite structured last year... We're all still wondering why this person was retrenched in March. I think maybe there was a personality clash somewhere, and we're all paying for it now" (Interview 17)

4.3.3. Opportunities to contribute domain

- **Job design and autonomy**

There is relatively high autonomy in most people's day-to-day work. Staff members can decide how they want to approach their tasks or even define their roles (for newly created positions). This is largely due to the rather ambiguous and diverse nature of work carried out in UCOs:

“You don't go to your manager and go “oh, do you think I should be doing this”...If there's a problem I can't sort out, then I'll go talk to my manager...that doesn't often happen” (Interview 5)

“I'd say I have more say in my job design than most people...because the parameters of my role aren't quite there, because it is a growing, changing role, especially with this restructure, I would say I have quite a bit of flexibility” (Interview 6)

For most people, working hours are highly flexible. Such flexibility is again necessary for business development and academic consulting roles. Only a few staff members (in corporate support divisions) have less time and place of work flexibility than others.

“We don't have any specific sort of shop-front, so everybody can work their own hours...there's flexibility as an advantage of working in the university system I suppose” (Interview 4)

- **Communication**

Vertical Communication

Manager- staff and team

Job or task-related communication between employees and their direct report is straightforward and open (Interviews 4, 5, 6, 10, 11, 12, 13, 15 and 19). The direct managers are usually located in the same office room with their direct reports or are very accessible:

“...because the nature of our work is quite complex, there are a lot of questions. (My direct reports) come to me if they don't know what to do, or unsure, or if there are things that I need to approve. So whilst they are extremely autonomous, my role (as the team manager) is very consultative” (Interview 19)

Aside from casual communication with the direct manager on a daily basis, most teams have regular weekly, fortnightly or monthly team meetings. Teams usually discuss work-related issues in these regular meetings (Interviews 3 and 4).

Most people seem to have casual, on-going conversation with their manager, so there is no need for individual meetings. Only one informant mentions having one-on-one meeting with their manager (Interview 6).

Information dissemination

There is a formal top-down flow of knowledge, starting from executive team meetings. General Managers from the executive team will pass the information on to their direct reports (usually line managers) (Interview 23). The line managers will then pass the information to their direct reports (Interview 14).

One informant feels that the passing of information between line managers and their direct reports needs to be improved (perhaps a lot of information is not communicated to the team members):

“Maybe the one thing that can be improved on going down the track is direct manager-staff communication in some instances, that I think, in terms of the upper half, it’s doing really well” (Interview 6)

One example of this issue is reflected in staff members’ different understanding of pay increase rationale (as mentioned in section 4.3.2.). The lack of cross-level communication also adds to this problem.

Executive team and non-direct report staff members

There is not a lot of cross-level communication between executive team members and staff members who do not directly report to them, especially after corporate restructuring. For example, one informant suggests:

“I don’t really talk with executive team members...it’s usually just my manager and the manager of another team that I often work with... I don’t think they (the executive team) will be really identifying how happy the employees are” (Interview 16)

This is increasingly becoming an issue as the company expanded through merger and expansion. In the past the company was able to have weekly or monthly whole-company meetings, yet this is no longer plausible (Interview 14). One informant feels that the lack of

effective cross-level communication structure and inclusive company meetings will eventually lead to big problems:

“(After the restructure) the managers are off doing what they want to do and I’ve already seen double-up, and people not consulting the people they need to consult about issues. They’re off reinventing the wheel. It’s crazy...Those (division) managers, how they think they are going to manage that, is that those division managers meet once a month, but that’s an hour or two, they’re doing like the top five things on their list...That’s them communicating and we don’t hear any sort of update out of those meetings at all...This will lead to big problems” (Interview 17)

Horizontal communication

Cross-division and company-wide

Because the company is spread across two different campuses, cross-campus communication also seems to be an issue. The fact that the one division used to be another company adds to the complexity.

“I don’t know what happens over there (at another campus). I just know what happens here” (Interview 5)

The strategic level is also aware of this issue:

“Whilst communication is quite good here within this group, I am not sure how communication is, between the technology commercialisation division that works here, and the rest of (the other campus). That’s something I’m working very hard on...there are probably still some communication issues unfortunately” (Interview 1)

The company is making an effort to enhance communication between the two sites through arranging cross-division development courses, company parties and morning tea, as well as installing hot desks that allow staff members to work in another site (Interviews 9 and 16). However, despite these efforts, one informant feels that these measures are not addressing the issues. This informant points out that the 2012 company restructuring has worsened company-wide communication.

“(With the restructuring this year) I think we’re getting worse. We’ve taken a step back five years...We are now in silos and we’ve lost all that cross-communication...what has happened is that some of the middle managers and the managers there, now all they have to worry about is their patch, and their workloads, (which) in my view, have actually decreased, and they are happy about that. I have not heard anybody else say that out loud...Junior staff on the lowest rung had said to me “Oh, I really miss this meeting” and “Oh, we never get to hear about this anymore”...I think it’s quite tragic when people on the lowest level can

see what's going on and managers think it's going to magically happen...Communication is the most important thing in a company, and we've lost it, and I can't believe that nobody can see that... We have morning tea once a month for everybody in the building, but that's just social. It's nothing to do with work" (Interview 17)

- **Staff involvement**

A common observation across all interviews carried out in UCO One is that most of the strategic decision-making in this organisation is highly centralised and carried out in the board meetings and executive team meetings. Individual staff involvement in decision-making is usually limited to determining their own work and performance objectives.

Key Performance Indicators setting

As outlined in section 4.3.2., objective-setting is a consultative process between individual staff members and their direct manager. This shows that there is some level of employee involvement when it comes to deciding how their performance is measured (although the task-related aspects will need to be aligned with team KPIs). However, it is up to the board to decide what the organisation is to achieve and the executive team to decide how these organisational goals are to be achieved.

Team KPIs derive from the company KPIs and the general manager's KPIs; therefore individual staff members are not involved in setting-up team KPIs:

"At the beginning of the year the company puts together their proposal for what they want to achieve for the year. Based on that, they split out into the various divisions- who's responsible for which aspects, and then that gets filtered down through to the staff...we've got our company expectations and then our department expectations" (Interview 10)

Staff members who are in new roles tend to play a more significant role in setting and defining their own performance objectives:

"For my role, the expectation and functions are set...but your input within that parameter is readily sought...my role is evolving too because they've never had this sort of position, so it is unfolding and it is somewhat dynamic at the moment as we begin to define it" (Interview 3)

Another company activity that involved all staff members was a formal discussion that took place two years ago, during which the company asked its staff member to raise aspects of company culture that are important to them and implemented these (as company values and behaviour) (Interview 18).

4.4. Employee perceptions as HR outcome

4.4.1. Employee appraisal

Overall, employees' appraisal of the company reflects a mixture of positive feedback and concerns or discontent. Some staff members hold a very positive perspective of the company:

"I am enjoying the role very much...I'm very impressed with my experience of (this company's systems) to date" (Interview 3)

"I have felt that the company and my management have been quite careful to make sure that I'm ok with what I am doing...they've been quite good" (Interview 6)

"It's a great place to work for and it's a good team definitely...I feel very fortunate to be working here" (Interview 13)

There are also a few HR activities that received special positive feedback from employees, including salary benchmarking efforts and the efficiency of payroll system:

"They've actually brought in some good measures to make sure that we've been benchmarked across industry. They take into consideration what other organisations are paying for the same position, so they're pretty good like that" (Interview 6)

"...for example, I'm very impressed with how this company does payroll and how accurate and how well it's run...the system is well-designed and well-run...they've just implemented the staff portal, and (I had to) take a leave the other day. It was very simple" (Interview 3)

One person feels that the company is trying hard to ensure that the staff can work in a great environment with appropriate procedures and policies:

"I think (the company's current system and routines) does (provide employees with motivation). Over the last few years the company has really been looking at all the procedures and policies and everything we have got in place...I think they put a lot of effort to make sure that the tools you need for your job, you've got. This company more so than other places I have work" (Interview 10)

Having experienced numerous organisational changes, some informants see problems. One chose to only focus on the job. For example:

"No (I don't know what this restructuring is about). There's always a restructure or name change...(It's always changing) so you just kind of go with it and do your work" (Interview 26)

Another informant expresses strong opinion regarding decisions made by the strategic level:

“The overarching thing that really concerns me is that they (strategic level) think that there is structure, that they know what’s going on and everything is fine and this new organisation is fantastic. I don’t know if they are just saying that to convince themselves, but they are not convincing me. We’ve got so many new people now that nobody is going to speak up. They’ll just go through the motion” (Interview 17)

Some other employees can see issues but understands and accept how executive members and managers are dealing with these issues.

“There were some comments (from the staff members) that they mentioned something but it is not done (by the company)...but from a company point of view, you can’t do anything. Everything has to be directed at a certain direction that the company is taking...I think the company is always very sensitive to what the team wants to do and how to keep people in a motivated mode...Obviously the company cannot do anything whenever a person complains, but I think generally the company has been taking in feedback and making changes and doing things to make the working environment a bit better and improve it. Over the last three years I think there has been more improvement rather than the not-too-good things” (Interview 14)

4.5. Chapter summary

The above shows that this organisation currently adopts an HR strategy that aims to foster more conformity across the company. Its HR goals and objectives are set to both assist its strategic intentions as well as address internal issues. Due to the history of the organisation and its recent restructurings, current HR strategic objectives place strong emphasis on achieving better integration through improving communication and building a stronger sense of organisational identity (values and behaviours). On the other hand, the HR division has also begun establishing clearer policies and procedures, which are key components for HR architectures that are more mature and strategic.

The information presented in Section 4.3 shows that the current HR architecture in place still requires further development for the intended climate to be created. While it is evident that some positive changes are being made, informants’ experience and reflection of the HR practices to date are fragmented and inconsistent. Experiences vary substantially depending on employees’ time of joining the company, the length of time they have been in the company (“older” staff members are more critical, whereas staff members who joined more recently tend to provide more positive comments), the team they are in, their direct manager, and their jobs or roles. This reflects the lack of uniformity and

standardisation in the organisation's HR policies and practices and the fact that HR has traditionally been viewed as an administrative area without much strategic value. HR is not an area of particular interest to the board, although the GM of HR is now part of the executive team and the company now acknowledges the strategic importance of HR.

Some new and more structured guidelines and procedures have been implemented very recently. These guidelines should increase organisational effectiveness and efficiency with time. However, while effective HR initiatives and changes can address some of the above issues, other issues, including development programs and communication, may be more difficult to solve because of budget constraints and company structure.

The main challenge for this UCO is constant changes in its mission, roles and structure. As the university did not set up this company with a clear and strong objective in mind, various problems emerged. Other than changes and restructurings that took place continuously throughout the past 15 years or so, academic staff members, who are important stakeholders of the UCO, have been resistant towards commercialisation and unclear or confused with the role of this UCO and how to work with it. This hampers the company's ability to achieve better commercialisation performance. These changes also unsettled UCO staff members and hindered the organisation from setting up a standardised set of clear policies and procedures and adhering to it, which in turn impeded HRM effectiveness.

The next chapter presents the empirical research findings for UCO Two.

Summary table for UCO One

Strategic goals	<ul style="list-style-type: none"> • Providing commercial services to the university (increase university cost efficiency)
Organisational control structure	<ul style="list-style-type: none"> • Strongly influenced and controlled by the university • Divisional structure with three revenue-generating divisions: teaching and learning commercialisation (customises programs for the university’s own students), asset management and consulting, technology transfer
Measurement of performance	<ul style="list-style-type: none"> • Whether objectives set by university and the board are met • Significantly more focus on the university than industry partners
Strategic HRM presence	<ul style="list-style-type: none"> • 3 HR members looking after around 70 staff members • Company too caught up with changes and restructuring and employees are unsettled. HR still holds most of the HR responsibility, but new standards are being implemented
HRM system coherence	<ul style="list-style-type: none"> • Weak linkage between performance, development and rewards. Values and behaviours quite general. Company induction standardised but job-related training usually informal and disorganised
Intended HR outcome	<ul style="list-style-type: none"> • Enhance integration and “one culture” for the company • Teamwork, enhanced communication (both vertical and horizontal), positive and harmonious workplace • Enhance customer (academics) service and alignment with university (less obvious at individual level)
Strategic-implementation alignment	<ul style="list-style-type: none"> • Ineffective vertical communication causing issues with strategic-implementation alignment • Some still view HR as “ticking the boxes”
Key organisational challenges	<ul style="list-style-type: none"> • University did not clearly define UCO roles and enforce or regulate academic participation • Constant changes • Difficulties to integrate technology transfer arm and teaching and learning services arm into one company
Key HR challenges	<ul style="list-style-type: none"> • Lack of structure and policies around company systems and routines. Existing system incoherent • Staff resistance to constant organisation changes • Both vertical and horizontal communication problematic • A number of dismissals affected trust between strategic level and employees • Company split over two locations makes integration challenging

Table 4.1: Summary table for UCO One

CHAPTER FIVE: UCO TWO “THE RELATIONSHIP-BUILDER”

5.1. Organisational History and Structure

The predecessor of UCO Two has been in business for over 50 years, making it one of the country's oldest UCOs. By 2005, it was clear that the organisation was no longer productive in terms of commercialising the university's research output. Therefore the university decided to restructure the organisation and the current UCO was created as a new entity that solely looks after technology commercialisation for the university. There are four distinct phases to the organisation's development in the past decade.

2005-06: In the period leading up to 2005, the organisation had a negative reputation on campus. Academics refused to work with the organisation, work morale was low and many staff left. The situation worsened as the organisation outsourced its consulting department to only focus on technology commercialisation, but soon found out that it has lost its main source of income as technology transfer did not make sufficient financial return. The university then restructured the organisation and retrenched most of the staff (only keeping four members). Although the re-building process was disorganised and new employees were recruited when required, a coherent unit was eventually formed. By 2006 there were around 12-15 people (Interview 46).

2006-2011: Soon after the 2005 restructuring, the university's Deputy Vice-Chancellor of Research (DVCR) brought in a new CEO and a new general manager (GM) commercialisation to set up company structure and procedures. During this phase, the organisation ran on a highly centralised decision-making system as the CEO for this period had a very hands-on leadership style. While this enhanced the efficiency of company processes, some staff members felt that there was a lack of trust and that those who had a favourable relationship with the CEO had more privileges than others (Interview 37).

2011: The UCO was relatively stable up to year 2010. By 2011, it became clear that the company was again facing several issues and needed further change. The main reasons were for financial returns, low academic satisfaction (with the UCO) and an unsustainable organisational model, which focused on pursuing financial goals to the exclusion of others (Interview 51). When the CEO fell ill and no one knew who was going to come and take over the CEO position, employees started leaving the company (Interview 36).

2011 restructuring and onwards: Towards the end of 2011, the board's search for a new CEO was finally successful. The new CEO brought with him an innovative ideology that dismissed the previous model. In order to align with the new model (which will be discussed further in section 5.2.1.), a completely new organisation structure was created and the scope of some employees' jobs has significantly changed (Interview 44).

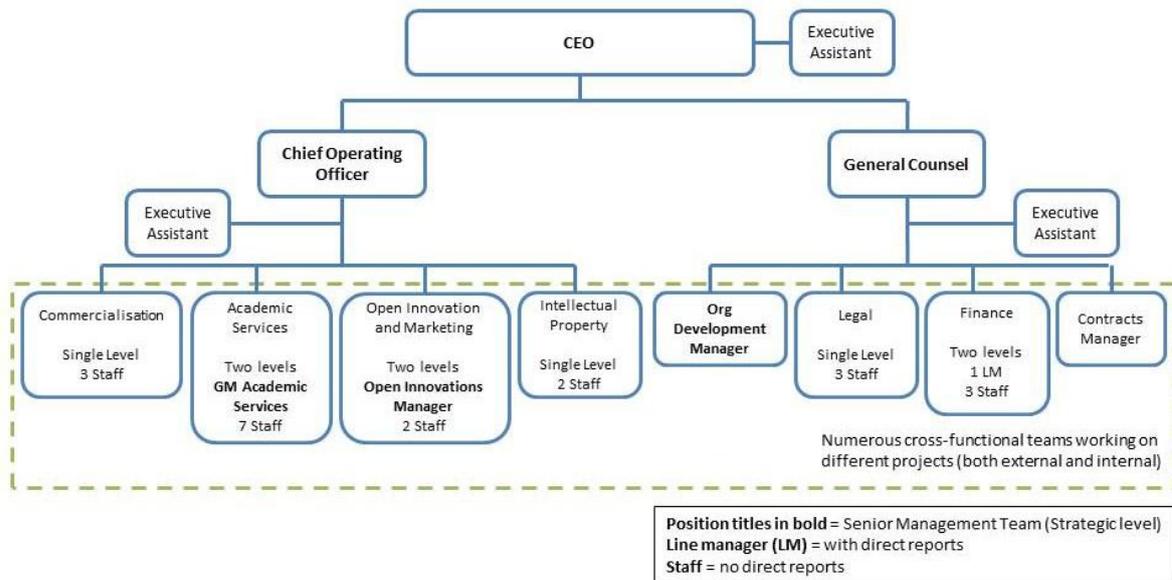
A board that consists of five university executive members and two directors with a corporate background governs this organisation. The board helps the UCO by fine-tuning its strategy and providing feedback on the effectiveness of the strategy. However, it is the UCO's CEO who leads the development of the organisation's strategic aims and strategic plan (Interview 32).

In 2012, the organisation was located on a single floor within a building on the university's main campus. Staff members came in and out and often talked to each other passing by the office rooms. However there were not many visitors and there was also no reception or meeting space for visitors (unless the staff member had a room to him or herself). When staff members needed to have a meeting, they usually made use of meeting rooms in the other wing of the building or on another floor.

There were 31 staff members at the time of the field visit. The male to female ratio is around 1:1, yet this ratio is 5:1 for the senior management team (SMT). There is also a significant difference between the gender ratios for the two divisions, where around 80% of the operations division employees are male and around 90% of the support division employees are female.

This UCO makes use of a matrix organisational structure. The SMT represents the organisation's strategic level and consists of the CEO, Chief Operating Officer (COO), General Counsel and Company Secretary (hereafter referred to as "General Counsel"), Open Innovation Manager, Organisational Development Manager (ODM) and GM Academic Services (Interview 44). There are two main divisions, with the COO looking after the client-facing teams (operations division) and the General Counsel looking after the supporting teams (see Figure 5.1).

Figure 5.1: Organisation chart for UCO Two



Client-facing teams (Operations division)

- **Commercialisation:** Whereas in the past business development managers (BDMs) would seek and handle research output commercialisation from the very beginning till the end, the 2011 restructuring created a commercialisation team that focuses only on “high-value opportunities”, which are research output and technologies that have a track record of generating good financial return, or show great financial potential (therefore this team is also often referred to as “high value team”).
- **Academic Services:** This team is in charge of talking to academics and researchers and finding out what services academic researchers need from the organisation, whether it is help on grant or a research agreement. BDMs from this team identify an invention, look after it, and they will either push the invention down the Easy Access IP path or nominate it for the high-value team. The company has also created a position that focuses on increasing commercialisation awareness among students in the university.
- **Open Innovation and Marketing:** This team looks after all the branding, messaging, all the marketing core materials, the web, social media and engagement with new partner organisations, which are essential for an open innovation model (Interview 44).
- **Intellectual Property:** This team is in charge of managing patents.

Supporting teams (Support division)

- **Organisational Development Manager (ODM):** The ODM looks after all HR issues. The position title changed from HR manager to ODM during the 2011 restructuring, reflecting the organisation's intention to view HR as part of the company's strategic development rather than administrative processes.
- **Legal:** The legal team provides legal advice for the organisation's commercialisation activities.
- **Finance:** As part of the 2011 restructuring, the company decided that it would adopt a lot of the university's financial system and did not need a CFO. There is now a financial manager, who reports to the general counsel, looking after the company's financial matters.
- **Contracts Manager:** The contracts manager looks after the processes and services around contracts management. Although this position reports to the general counsel formally, the contracts manager also has regular meetings with the COO.

Matrix Teams

Apart from the above traditional divisional structure, this UCO also utilises a matrix structure by setting up numerous cross-functional teams to work on technology projects ("Project teams") and develop or implement organisational changes ("Working Groups").

- **Technology/ Project teams:** Generally, for each technology project there is at least one person from each functional team (commercial, academic services, accounts and legal), but there is not a formal rule and staff members are invited to these project teams as appropriate for each project. It is also possible for one person to look after one project on his or her own.
- **Working Groups:** These groups focus on initiating organisational changes. Working group members are again drawn from different functional teams. Each group has a theme, ranging from organisational culture to finance. The CEO nominated staff members for each working group and each working group is asked to look at how the processes are running, review the processes and make recommendations from their particular perspective. Management team members may also join the teams, but will only play a passive role that provides information as needed.

5.2. From commercialisation strategy to HR strategy

5.2.1. Organisational strategy

In the past, the organisation's strategy had always been to generate as much profit from research as possible. After the 2011 restructuring, the new strategy, which was introduced by the new CEO, aimed to increase both the organisation and the university's flexibility and openness in their IP approaches and focus more on knowledge exchange, rather than commercialisation revenues. Therefore the organisation now places strong emphasis on innovation and publicity, as well as fostering relationships between university academics and industry partners, which are essential for successful knowledge exchange.

“Over 90% of UCOs are not profitable, so let's quit chasing that aspect of it and instead pursue a strategy that brings in more money, more publicity, more recognition for the university...in industry, reputation follows money, and in universities, money follows reputation. So making this a reputation play rather than financial play is good for the university” (Interview 32)

The new strategy views UCO success as performing well on three vectors: bringing in financial returns from intellectual property (IP), proving value to academic community and building positive external (industry partners) perception. The three vectors often push in different directions, but it is critical for the organisation to achieve all three (Interview 51). Although generating financial return is one of the three criteria, this UCO positions itself as a service unit for the university rather than a money-making unit.

“The university has to accept that at least for the short to medium term, [this company] will be a cost to the university...we are (now) saying [this company] is about innovation. Innovation requires risk in order to get rewards” (Interview 51)

Easy Access IP

As part of the new strategy brought in by the new CEO, the organisation introduced Easy Access IP, which significantly reduces barriers and procedures to commercialising research output. The Easy Access IP initiative started in Glasgow around two years ago and as of 2012, eight or nine UCOs around the world have adopted this strategy (Interview 32). Adopting the Easy Access IP model means that the organisation no longer has to spend as much time and resources on assessing every opportunity.

“We revamped our invention evaluation processes so that we're not committing several hours to explore these smaller opportunities just to see whether or not we should spend more resources on them. Instead we'll take the ones that have obvious

high value where we could make millions of dollar. We can cherry-pick those and put them to the side, but the other 80% we'll quickly write up a summary, put it online, talk to some companies in the area and let the market tell us whether there is interest” (Interview 32)

5.2.2. Key organisational challenges

Currently, there are three key organisational challenges. First, as the university's promotion system is largely based on scholarly publications, academics are less likely to engage in commercialisation activities. However, this country is currently conducting a pilot exercise that includes commercialisation performance in the measurement of universities' performance. Therefore there is hope that this challenge can be addressed in near future.

“Promotion...is based on the number and quality of your publication...In UK...twenty percent of university score will be based upon demonstration of the impact of the research. That has changed the game...[This country] is at the moment going through a pilot exercise to see whether or not we can do that” (Interview 51)

The second challenge is more pertinent to international university commercialisation activities in general. The commercialisation of social sciences is largely ignored at this stage, especially because existing international measurement matrix focuses on channels through which science and technology commercialisation flows. However, social sciences are the areas that often generate both important policy advices and thus high levels of financial return. As this UCO is also mostly focusing on science and technology commercialisation at present, it may be possible for this organisation to start developing opportunities in other areas such as social sciences and arts in the future (Interview 51).

Third, although the Easy Access IP model presents an alternative way of approaching research commercialisation, companies do not necessarily want to invest in early stage inventions which have a high risk of failure. Therefore the effectiveness of the Easy Access IP model is yet to be proven.

“It's a hard thing, especially in [this country] where people just want things finished...With the Easy Access IP...It certainly gets it easier for them, but it doesn't make it much cheaper for (the companies)...They need to make an investment. So it's not easy to give it away” (Interview 50)

Nevertheless, so far, the university and academics have responded positively to the organisation's restructure and has been “very receptive to the new message” (Interview 39).

Prior to the formal introduction of the new model, there were concerns that academics may respond negatively to the fact that their inventions are to be given away for free. However, this concern has later proven to be ungrounded as the academics have been the most supportive of all.

“The vast majority (of academics) don’t think their research is worth a million dollars, but they think it’s a pretty cool invention, and if they can find somebody to work with in developing that invention, everyone is happy” (Interview 51)

5.2.3. Human Resource Strategy

In order to support better the new organisational strategy, the HR strategy also experienced a significant shift early 2012, shortly after the restructuring. The HR function was renamed as Organisational Development (OD) function to emphasise that the new HR strategy values people and talent development rather than centralised and administrative line management. Staff members are treated as “people” rather than “resources” (Interview 35). Most importantly, according to one informant from the strategic level, OD places much more focus on employee initiative and autonomy through building a trust relationship.

“We don’t want to say people are resources or assets, because that would, for us, indicate that they are an inanimate object rather than a person who adds value to an organisation, and every person has the potential to add value to the organisation” (Interview 35)

In the past the HR goal has been to achieve efficiency through line control. Now the new OD strategy pushes for high levels of employee innovation and involvement. This new OD strategy, according to one informant, suits the organisation’s roles and strategy better.

“(The old model) wasn’t participatory. Very old styled line management...we want to create high performing teams rather than the sort of traditional line management structure, because what we do is very complex and you can’t manage complex businesses with line management structures” (Interview 36)

Although it is clear that the company has certain goals that it intends to achieve with its people management, there is not a written, clear HR mission statement (Interview 32). The current OD goals include providing staff members with more authority (and therefore more autonomy), increasing company effectiveness through flexibility, assisting with resource leveraging and creating a positive work environment where staff members enjoy coming to work (Interviews 35, 36 and 51).

There are formal board meetings every two months. HR matters including turnover, recruiting and organisational health and safety are reported during the board meetings, but

not individual staff performance matters as these are confidential. According to one informant from the strategic level:

“Certainly the board is more interested in our staff, and what we’re trying to achieve through our hires...They’re focused on what the company is trying to achieve and they’re quite happy to let management deal with how it gets achieved, and that includes the HR matters” (Interview 32)

Role of the OD function and the ODM

The role of the ODM (HR manager) prior to the restructuring was much broader, encompassing areas including administration, staff, company operations and HR. The OD function became more targeted after the restructuring and its key roles at this stage are to lift HR to a more strategic level by engaging in more HR planning, change management, culture-building and talent management, in addition to general HR activities (Interview 35). Activities that have been implemented by the ODM since the restructuring include a job description review, a large amount of recruitment, involvement in the creation of a standard induction program as well as running a culture survey, which will act as the basis of a team-building day later in the year. Other activities in the agenda for the next six months include a learning needs assessment, and a performance review (and how it ties to remuneration and rewards).

From the staff members’ perspectives, the new OD function clearly resembles an HR function that is moving away from the traditional administrative model (i.e. making recommendations rather than focusing on processes and administrations only). However, the difference between HR manager and ODM does not seem to be clear to most staff members. For example, one informant describes:

“Originally she was the HR manager, but she’s moved into er, I guess, um, it’s called, is it organisational development manager. I think she’s been tasked at trying out some changes. Making the organisation become more than it was, rather than just managing people’s expectations. I don’t know...I know that she has been preparing structures for the company, but I haven’t seen the results...I guess I’m interested to see what organisational development is happening” (Interview 43)

Similar to the finance function, the organisation is also looking to make use of the university’s central HR resources, yet it is still unclear as to what changes will be made at this stage. At present the university does not manage any of the UCO’s HR function (Interviews 32 and 35).

One informant, who has particularly strong views on the OD function, feels that the company lacks a “proper” HR function, which made it difficult to report issues. The only two channels of report will be either directly to the CEO or through the line manager. However, the new CEO is usually not present (in the office) and is very laissez-faire. The informant also says that overall there is a lack of accountability. Therefore this informant feels that the organisation needs either an effective HR function or a HR function that is independent from the company. In addition, this informant feels that the OD manager is not suited for the role and implied that the HR manager's response to previous reports of bullying was inappropriate and did not mitigate conflicts effectively. Also, the new model intends to shift HR responsibilities to line managers, but this again is problematic as line managers are not trained in HR (Interview 33).

There still seems to be some disagreement or confusion over the role of the ODM and line managers' responsibilities. With regards to job-related training and development, the ODM emphasised the line manager's role in it:

“The manager needs to administer that, because they are their manager, who will really know how they should do their jobs” (Interview 35)

However, a line manager said it is the OD manager's area:

“Again, talk to the ODM. It's all her area. There is not sufficient, we're looking at a sales training program...we don't have enough external programs” (Interview 34)

Throughout the interview, this line manager holds an indifferent attitude towards all HR functions, yet part of the restructuring is to shift more HR responsibilities to line managers. Perhaps there is a need for the company to better clarify and communicate the ODM's role to all staff members!

Intended climate and culture

The strategic level and management prior to 2011 did not place much focus or thought on company climate and culture. However this has changed since the new CEO joined:

“...with the previous management, there was no focus on culture, there was never intention to focus on culture or any of that sort of staff. It was a very old model, management style that would probably have been in the 1980s, 1960s...so now, particularly in the last 12 months, since the restructuring and our new CEO, there's been a complete change in the focus on the culture of the company, which is something really good for me to see because I have seen there's a need for it” (Interview 35)

There is not a clear written culture statement to date (Interview 35), but the strategic level does have a few broad goals in mind in terms of the type of climate and environment it wants to create to support the organisation's strategic goals. In order to provide relationship-building services between academics and industry partners, and better support for the researchers in maximising the use of university research especially, the strategic level wants to create a culture that emphasises openness, integrity (alignment with university) and professionalism (providing professional services) (Interview 51).

- **Innovativeness and taking initiative**

Informants at the strategic level suggest that the management tries to create a culture of innovativeness and willingness to try out new things. For example:

"...let's be clever, let's be innovative...we've changed the way people do licensing by Easy Access IP (and it) is viewed as radical, is viewed as dramatic...So it's about finding innovative ways of making more stuff happen" (Interview 51)

Many employees also refer to taking initiative and being in charge of changes in one's role. For example:

"I think they are trying to achieve freeing us up, making things easier...I think they are trying to create a more, I guess more of a Silicon Valley culture- you know, innovative, young, fresh- type culture, rather than like a legal office culture" (Interview 43)

- **Quality focus**

Members of the SMT describe the importance of delivering quality service. For example:

"Quality is critical, because you can always say to somebody "sorry, I'm still working on that", but if you do something badly, that will always come back and bite you" (Interview 34)

One employee also describes the importance of providing quality service:

"I guess behaviours are around making sure that we service people effectively and quickly and professionally and that we have a good relationship with them" (Interview 39)

- **Transparency (through enhanced communication) and fairness**

The strategic level also intends to ensure transparency and fairness:

"Absolute transparency. Absolute fairness...I treat everybody equally. I don't do hierarchy. I hate hierarchy. I don't look over people's shoulders. I don't micromanage people and I trust people" (Interview 36)

Informants' descriptions also reflect their understanding of this intention, and explain that this is achieved via enhanced communication. For example:

“(Here) I think it’s a pretty open culture. It’s pretty transparent. It’s not hierarchical...communication between everybody, no matter what team they’re in. I think that’s the main thing we’re focused, and the main thing that came out of those initiatives, everyone sort of felt like we didn’t have very good communication (in the past)” (Interview 38)

- **Teamwork and collaboration**

It is also the strategic level's intention to emphasise a teamwork culture.

“I would like to say that the collaborative, team-based approach, and so behaviours that are embracing that, behaviours that are making those teams successful is certainly rewarded and acknowledged” (Interview 32)

Some employees are also very aware of this culture:

“I guess they are trying to create a culture which is flexible and more team-orientated. Part of the open-plan is to (allow staff to) work more as a team” (Interview 49)

One informant, however, says that he cannot comment on the company's culture or managers' intention because really everyone is working on their own things and there is not a collective culture:

“I really can’t comment (on the company culture). I’m so busy doing my own stuff and I know what I do. It’s very hard to answer you what they’re trying to achieve in terms of culture. I see things around me, (but) it’s really not a clear idea what the culture is trying to be” (Interview 46)

Company values and encouraged behaviours

The company has not outlined particular company values or behaviours yet. One manager suggests that it is still a bit early for the company to decide on and formalise the sort of behaviours that should be encouraged or reinforced:

“I think we’re still building the structure that’s needed. Once everything is set in place and we’re not working on the company, then I guess it becomes a point of what things work and what culture we push” (Interview 44)

5.3. HR architecture and efficacy

5.3.1. Knowledge, skills and abilities domain

- **Recruitment**

HR Planning

New roles and new divisions are created via direct communication between the strategic level (CEO and COO) and implementation level rather than through HR. It can be either a bottom-up initiative (as with the creation of a Marketing Team) or a top-down decision:

“This role...was outsourced previously to a company, and I think the decision was made that they (strategic level) want to move it in-house” (Interview 40)

“(I wrote) a paper to senior management, saying that I think we need to have a new member because one of my staff member is leaving, and the result of that I’m putting up a slight restructuring of the skillsets or the type of person. I will put that forward to the senior management team, they will then review it” (Interview 34)

- **Selection**

The company works with a recruitment agency, especially when looking for business development managers. One SMT member explains that it is difficult to find recruiters that understand the knowledge exchange or technology transfer business; therefore this company only works with one particular recruitment agency (Interview 35).

Recruitment channels

The recruitment agency is not the only channel through which the company attracts candidates. This UCO also places advertisements on the university’s website or within a relevant professional body (Interview 35). Other than applying through a recruitment agency, informants also mention having learned of the vacancy through word of mouth (from friends or other alumni of the university) or from newspaper and internet advertisement posted by the company.

Selection phases

There is not a strict and standardised selection procedure, and people joining at different period have experienced different selection procedures. Nevertheless, interviews have always been the main selection mechanism.

Short-listing: The ODM will select four or five for interviews.

Interview(s): Depending on the role, most candidates go through two or three rounds of interviews. For candidates who are overseas, it is also possible to interview via phone or video conference (Interview 37). There is a different panel for every round of interview. Depending on the role, the first round of interview usually involves the ODM and the direct manager (sometimes with another senior member). The second round of interview involves the division manager and a team member (sometimes the ODM may join the panel as well). For those who have experienced a third interview, it is the CEO who carries it out. One informant describes differences between the three interviews:

“I would say the first interview was the stock, standard, learning about me and my experience. The second one was more a test on thinking on your feet and how resourceful you are without having to go and consult anyone. The third one I think was a personality matching test between me and the CEO. That’s kind of how I thought it was” (Interview 41)

From informants’ descriptions of their interview experience, interview questions are different for each role or position. Some describe process-related questions, for example how to complete certain tasks (Interview 40); some describe hypothetical situations, for example how they will deal with certain situations (Interview 45); and some are asked to explain previous work experience and explain why they are interested in joining the company (Interview 47). For newly-created positions, candidates are asked to interpret their perspective on and understanding of the role (Interview 41).

Testing: There is not a standard testing process that everyone has to go through. Some candidates have been through a testing process while some others have not. For those who have received tests, it is usually through the recruitment agency (Interview 49). Depending on the position, some have to complete a drafting or writing exercise (Interviews 33, 36, 38 and 50). However, one manager doubts the purpose of writing exercises:

“I don’t know what it proved though... Was that a differentiator between candidates? I don’t know...the procedure that time was to put out a little example, so I did that...and I didn’t think it changed my mind about anything. I found it not a particularly useful exercise” (Interview 50)

Reference check: This is the final selection phase for all new staff members.

The direct manager is usually the main person who makes the final selection decision (Interview 34).

Selection criteria

Selection criteria are different for every position. The organisation is rather flexible in relation to candidates' previous work experience and does not mind hiring people who have only worked in the private sector, as the managers are more interested in what a particular person can bring to the role (Interview 32). For some roles it is necessary for the candidate to be qualified to practice (e.g. attorneys, lawyers and accountants). Although some BDMs have a PhD in the relevant field and find it helpful when speaking to the academics, it is not a must-have qualification.

In comparison, the organisation places much stronger focus on organisation-fit, work attitude and people who have the right mix of skills (Interview 50). One manager explains:

“They need to be able to get on with the inventors. A lot of the inventors are very, very bright, very specialised. They need to be able to understand to some extent the technology...and they need to be able to market it. They need to have the ability to face external world...Very few people can do that” (Interview 34)

Timeframe of the whole recruitment process varies, for some it could be as fast as a few days, while for others it may take up to a few months. In general, it is much faster to fill administrative roles than BDM roles. For example, a legal team position can be filled “in the matter of a week” (Interview 38) and a team assistant started working the day after the interview (Interview 49). The process is much longer for BDM roles and usually takes three months (Interview 34).

- **Training**

Induction

Prior to the restructuring, there was not a structured induction process. New staff members used to receive a few “loose leaf” documents and would go through a couple of meetings with different people as required (Interviews 38, 43 and 50). As part of the organisation's new initiatives, a working group was created to formalise the induction process. The induction process now involves receiving an standard induction pack, learning about company policies and systems, as well as a range of scheduled meeting with other staff members and external stakeholders (according to their positions). The ODM governs the delivery of the induction program. There is a six-month probation period for all new employees under national legislation, but the company rarely had to let people go during this period (Interview 35).

Employees who have experienced the new, formal company induction process compliment the program. For example:

“Training (induction) is good...I was given a program, and that was all scheduled meetings. I basically met everyone who works in [the company] and in some way or another it was explained both what they do and how I would interact with them” (Interview 41)

Job-specific training

Most new staff received on-the-job training through handover, mentoring or working with different colleagues. Despite the lack of formalised job-specific training, most staff members feel that they have settled in quite well due to having previous work experience.

“Everything has just been sitting with people, although there have been informally cases where I had to go out on meetings with people and see how they do it first-hand...There is also a Senior BDM...he’s sort of unofficially taken me under his wings as well” (Interview 41)

For newly created roles, staff members receive minimal training and will actively build or interpret the roles on their own:

“My position was a newly created (position)...Basically I was sitting with my manager on what I’m supposed to do. That was the first month. The next month I had a chance to actually do it myself...obviously it’s a working process” (Interview 48)

There are also instances where the company takes training as an opportunity to review and improve the role:

“There was also quite a bit of on-the-job training because my predecessor has left, so one of the goals of taking the position was to try and improve the processes around (the role)” (Interview 47)

Only one line manager mentions challenges to training. He feels that as most new staff members do not enter the organisation with the specific set of skills required for UCO roles, numerous skills need to be absorbed by new staff members. However, such training requires the company to allocate time and experienced staff to look after new employees (through mentoring):

“The biggest issue that I think we’re faced at the moment is training...because the skills that are required need to be trained, and it just takes a lot of time to train people, and that takes effort, that takes energy, and it takes people with experience to do, to lead it. You can’t just bring somebody on board and say “go for it” (Interview 34)

- **Development**

Development programs

While different individuals have been on different development or training programs, there is not a formal staff development strategy or process:

“For a long time we have sent individuals to various professional development programs, but we haven’t implemented a company-wide strategy as to what we’re really trying to achieve through those individual training things” (Interview 32)

Development opportunities are formally discussed during the annual performance review process, yet at this stage this discussion does not seem to drive any action, and when staff members do attend development programs, these are usually ad-hoc or as requested by the employee. Sometimes line managers may also suggest programs (Interviews 48 and 49). Similar to training, the ODM also provides advice on staff development, but it is the line manager who is responsible for his or her direct report’s learning and development (Interview 36). In other words, staff members will go to the ODM if they want to know what development programs are available, and then discuss their attendance with their direct manager.

- **Types of development programs/opportunities**

Development programs for the staff members remain fragmented. Everyone has had different development experiences and there did not appear to be any rules or structure around such activity. Informants have mentioned a variety of development activities, events and programs, including:

University programs: These programs focus on topics ranging from presentation and negotiation skills, coaching and management to computer software training (Interviews 36, 37, 38, 48 and 50).

Training required to maintain professional licenses: Development programs that are required for professional licenses (such as Continuing Legal Education).

Technology transfer-related training programs (including IT training): Technology transfer-related short courses that are offered by larger firms or industry bodies such as the Association of University Technology Managers (Interviews 39, 40 and 47).

Training for personal career advancement: Development programs that are more for staff members' long-term personal advancement. For example, two informants mention attending company directors' course provided by the Institute of Company Directors.

Formal academic or professional qualifications: Returning to university and study towards a graduate diploma or masters in a field relevant to employees' current role.

Courses to improve personal skills required for work: General courses that improve personal skills such as writing, sales or project management.

Conferences: Conferences are also an important activity for the BDMs. There is disagreement as to whether conferences should be counted as development. While some feel that they do learn from conferences (Interviews 43 and 44), others believe that attending conferences is part of their job as they are actively promoting university-industry linkages or building networks for work (Interview 39 and 50).

Some informants feel that actual hands-on work experience is more important than attending development programs, and training is only required when one is going to take up further responsibilities. For example:

“I mean, once you have experience in doing some licensing deals, and once you understand the processes within the university, it's your on-going expertise. You don't require additional training all the time, because your job requirement hasn't changed- it's the same as before...If they see that in order to move you up to be in charge of some greater responsibilities, they feel that you need some training, they would do that” (Interview 39).

Challenges

One SMT member defended the lack of structure around the company's staff development activities and explained that the diverse roles and skills for each staff member made it impossible for the organisation to build a standard development module (Interview 35). There are also difficulties around finding suitable development programs as technology transfer is a “relatively new field” (Interview 44). In addition, the company budget places significant constraint on staff development opportunities (Interview 39).

Another two SMT members believe that enhancing staff development does not necessarily require more money. Rather, it is about improving the coherence of the whole training system through collecting formal feedback to evaluate whether development programs are helpful and effectively linking development to performance management and rewards:

“I think we can do significantly better in terms of people development, but we don’t need to spend a lot more money...it’s not that we haven’t spent any money, but I don’t think we have been coherent in the way that we spend the money” (Interview 51).

“A good example is, if you go to a conference or an exhibition, there should be a huge report com(ing) out of those exhibitions...why send those people to (the events) if there’s no feedback?...every year they send four people to AUTM in America or Hawaii or Disneyland or whatever, and the same people seem to go over and over again, and I really question the benefit of that for [the company]” (Interview 46).

Therefore, one of the next OD focuses is to develop and implement a training-needs assessment that will be able to meet and manage each individual’s development requirements (Interview 51).

5.3.2. Motivation and effort domain

- **Performance appraisal**

While activities such as KPI setting and annual performance review meeting with line managers do take place, performance management process has not been standardised yet and it is also one of the focus areas for the organisation’s internal restructure (Interview 43). However the performance management approach is likely to be similar to the existing process (Interview 44).

New employees work out what their KPIs will be with their direct manager a few months after they join the company. Once new employees have an idea of what their role is and what their job is like, the line managers will seek their thoughts about what their KPIs should be:

“Had a one month progress meeting just to see how things are going. My next meeting, which should be soon, will be about working out my KPIs...I’ve been given the forms (about performance management processes) already...when I’ve drafted something I can go talk to the COO and we can go through that together” (Interview 40)

Although every staff member completes the performance discussion process with their direct manager, the ODM is responsible for developing and revising the performance management process, timing and method. The ODM also sees all the performance reviews (Interviews 34, 35 and 36). As the company is in the process of revising performance management procedures as of July 2012, informants describe their experience prior to 2012:

Beginning of the year: Informants agree that performance objectives are set at the beginning of the year with their direct manager through discussion. The OD manager prepares a schedule for everyone and sets the timeframe for performance discussions (and goal setting). Employees draft their goals, go to the manager, have a discussion, come to an agreement and finally sign the document.

Mid-year review: Most informants did not mention mid-year reviews. One suggests that there might be a six-month meeting, but it is not very formal. Most staff members have an on-going discussion with their manager regarding work and performance (Interviews 38 and 47).

Year-end: The end-of-year performance review is again primarily a discussion between the employee and the manager. Some do a self-assessment first, some do not:

“We do self-assess, and the manager gives us comments, and we finally agree”
(Interview 48)

“I’ve always achieved my KPIs, so I never had any negotiations...I just went to a meeting (with my manager), and was told that I met all my KPIs...I didn’t need to do a self-rating” (Interview 37)

Possible future changes

One line manager mentions the possibility of having other external people’s evaluation of his team members, perhaps as a future initiative:

“I will be the primary evaluator but there will be input from others...my hope is that it will be someone outside this group, you’d get some feedback from people they have been dealing with externally” (Interview 34)

360 degree evaluation may also be conducted in the future as part of the performance evaluation activity for managerial roles (Interview 35).

Although staff members should go through the performance management activities at around the same time, the company allows flexibility around special cases. For example, after completing a spin-off company investment, one staff member requested to be reviewed earlier so that he gets promoted earlier, and the requested was granted (Interview 39).

Key Performance Indicators setting

As of July 2012, many staff members’ KPIs have not been finalised for the year yet. One informant mentions that it should be set in a week’s time (Interview 47). One informant

suggests that in comparison to the large volume of work that needs to be done, KPI setting is of less importance and therefore there is a delay this year (Interview 37).

As part of the restructuring, KPIs for every staff member now derive from the company implementation plan, which is put together by all staff members:

“...when we built our strategic plan, we started with the strategic aims...this was led to a strategic plan which set out what we’re going to achieve. Then there was an implementation plan that identified 22 odd initiatives that we wanted to achieve to deliver the strategic plan. Each initiative we had activities related to that initiative, the outputs of those activities, and then outcomes and impact...so with our KPIs, we ask the employees to...identify the specific activities under initiative one that you’re trying to achieve, and what are the outputs of those activities...Not every employee is working on every initiative, not every employee is working on the same set of initiatives, it depends on their job description” (Interview 32)

The nature of KPIs has significantly changed as a result of the restructure. In the past the organisation evaluated staff members’ performance by numbers (such as number of deals done, number of spin-offs and amount of revenue). After the restructuring, although some numerical measurements are still used to determine the commercial research potential, KPIs are more about delivering company initiatives, establishing relationships and increasing engagement (Interview 39). Considering that everyone’s KPIs derived from the company implementation plan, as well as the large number of cross-functional team the company runs, the whole company could be viewed as a team. Therefore the list of company initiatives could be considered team KPIs.

“(There are no team KPIs) because we (only) have 30 people in the company, we have the broad company plan...there is the company strategic plan and then the KPIs are individual ones...We’re all working towards achieving that strategic plan” (Interview 35)

Challenges

Due to the nature of UCO’s roles, there are a few challenges around how performance can be measured. First, it is difficult to judge an employee’s performance based on the financial returns he or she brings in (especially for those in the supporting teams). Moreover, most staff members do not bring in much profit. This is part of the reason for the restructuring and significant shift in the organisation’s strategy.

“If you just think about the legal team for instance, there’s not really a “top performer”...there’s nothing that [you] can really do to “out show” anybody. It’s not competitive” (Interview 38)

“I don’t think there’s ever been a profit focus here, because most people don’t make any money. Most people don’t even pay for themselves in the organisation” (Interview 46)

Second, it is hard to judge the extent to which a KPI is met or not met:

“The rewarding system is fairly erratic, which I think should be looked at in a big way. I don’t exactly understand how they make a decision, who has met their KPIs and who hasn’t met their KPIs. It’s not clear to me” (Interview 46)

Third, a clear and transparent performance management and reward system cannot be developed across the whole company because every project is a different case and it is difficult to compare across everyone’s work. In addition, as everyone is busy with their own projects, no one has time to get to know what others are doing:

“Part of the problem is, nobody knows what everybody else does. We are individuals working here on our own particular projects...There’s no report saying what each person did and how they achieved this” (Interview 46)

- **Remuneration and incentives**

On top of the set salary, some employees were receiving a bonus (prior to 2012), which was based on a combination of individual and company component (Interviews 36, 39, 45 and 50). Informants on fixed-term contracts and administrative roles are unaware of the bonus structure (Interviews 38 and 49). Staff members’ bonus percentages follow a bell curve (Interview 36). The direct line manager and the staff member jointly agree on the bonus, while the management team decides how the money should be distributed (Interview 44).

Some informants feel that the company bonus component does not encourage staff to work harder because it is beyond the individual’s control and it is hard to articulate how exactly performance relates to bonus. For example:

“It’s more of a...you either did what you’re supposed to do or not, rather than any sort of gradient. I guess it’s a difficult industry to have some form of direct...you know, you can’t exactly pay commission type thing...like I said, it’s generally very arbitrary and collaborative...it’s not like a report card” (Interview 43)

Whether the bonus structure will continue in the future is yet to be decided. The CEO will make the final decision (Interviews 35 and 47). One informant believes that there is an intention to bring in the university’s remuneration structure, yet there may be challenges involved in such a measure in that the job nature does not match:

“One of the challenges is at the university the way that they do the banding is based on reports. If you supervise a department of 50 people, then you have a higher grading. In our case, we don’t have the opportunity to supervise 50 people because we are a small company, but the responsibilities that we have require us to have significant expertise and significant experience to deliver those services that we provide” (Interview 39)

Other than salary and bonus, the company also rewards completion of additional (job-relevant) qualifications:

“The organisation gives me an incentive of increased remuneration of \$1500 including superannuation every time I pass one module” (Interview 48)

- **Employee motivation**

Informants mention several factors that motivate them on their jobs, including:

Genuine interest in the nature of work or responsibility (Interviews 40, 43, 44, 45 and 49)

“I like doing the work...I like working for the university and it’s good that the work we do is trying to benefit the society. I can find out about the inventions that are coming out that people are working on” (Interview 40)

“I love it. I love seeing new technologies. I’m working with the best researchers in the world from time to time, and they are changing the world. That’s why I enjoy about working in a place like this” (Interview 44)

Flexibility

“People come here and work here for the flexibility I think. Because pay-wise we’re probably 20 to 25% below the market would otherwise pay for somebody here. This wouldn’t change in the future” (Interview 36)

Pay

“The biggest motivation is receiving compensation at the end of every pay day” (Interview 37)

Alumni wanting to help the university

“I’m a graduate from this university and I’m doing it to help the university. I like the university a lot. I’m an alumni from here...I’m doing (my job) because I’d like to see the university advance, get a good name, etc...pay is pretty bad, you wouldn’t do it for the money” (Interview 46)

- **Career progression opportunities**

Informants, regardless of their level within the company, agree that there are not many opportunities to move upwards within the company. However, there are some possibilities

for horizontal movement across the company, usually from legal or support roles to business development roles. For example, one informant explains:

“Everybody has got specialist skillsets that don’t translate to movement. That being said, we are very open to re-training...we’ve had business analysts who’ve become BDMs. We’ve had an IP person who’s become BDM. It’s usually specialists going into BD roles” (Interview 36)

One informant points out that one main challenge is the lack of a clear distinction between different positions, which makes it difficult for staff members to tell how they can move up the career ladder:

“I think the biggest challenge...is the (lack of) distinction in responsibilities between the roles. The business analysts, business development associates, BDM and the senior BDM...there should be increasing level of responsibility with seniority, but on a project-by-project basis it doesn’t seem to be a distinction between what [a BDM] and what a senior business development manager does...I wouldn’t know what extra skills I need to learn to get promoted” (Interview 37)

There is not a formal internal progression process and staff members do not have to go through any application or selection process. Staff movements usually happen through company restructure or a simple request-and-accept model (Interviews 36, 37, 39, 47, 48 and 50).

Exodus

Staff turnover in UCO Two appears to be a periodic phenomenon that occurs with company restructuring. Other than that, the company has been relatively steady in terms of its employment and “...there hasn’t been a mass exodus” (Interview 32). The organisation’s average turnover rate over the last 5 years is 12-15% (Interview 35).

One main retention challenge in the past 12 months has to do with managing staff members’ expectations after a significant shift in HR/ OD strategy. Some employees are used to the previous centralised decision-making and are resistant to changes. This is one of the main reasons why many employees have left the organisation in the past year. Even for those who stayed, it may take some time for staff members to completely settle and accept the new model. Two SMT members explain:

“(Turnover) has been high in the current change, because we’ve changed the model and they didn’t suit, but they didn’t leave on bad terms...Some people love working in that environment. Some people find it terrible, because some people say

“tell me what to do” ...This (current) model has one problem. If you can't deal with ambiguity, it becomes very hard for you to function” (Interview 36)

“As I said, there probably are some legacy issues, and there always is, when you go through a restructure or you change the CEO... I'm sure there are people under the old CEO who thought they are prospering a lot better and things are exactly the way they liked and now with a lot of changes they don't like that. People don't innately like change and sometimes people are sceptical especially with a lot of changes at once” (Interview 35)

Moreover, the nature of the UCO allows its staff members to acquire a broad range of skills. This makes the company's employees highly sought-after by organisations in both public and private sectors.

“Our people are getting phone calls all the time from outside...from the private sector and the universities, because you've got experience in patenting, legal, negotiation, dealing with people on campus which is about communication and dealing with difficult characters sometimes...That was one of the problems in that transition period because it was easy for people to come in...did two years and get a really better job somewhere else” (Interview 44)

SMT members view staff departure as a positive phenomenon. The company understands that it provides a training ground for staff members, and those who have left the company sometimes remain in contact and help expand the company's network. This is especially the case for those who move on to private companies. Most people who have left the company either moved to the private sector or to the governments, with the exception of a few that went to another UCO (Interviews 32, 34, 44 and 45).

“I think we also have a culture where we know this is a transit spot for people. So we know if we train someone to be a BDM and he goes to work for a private practice, he's not in competition with us. It's a good relationship...If they go to another university to do the same job, no (they don't maintain contact with us). If they go out to companies, the network grows” (Interview 36)

One manager explains that there is not really a problem with people leaving the company as they cannot take the network away with them:

“The technology is what creates the network- that link of “we have the invention” that we have licensed. So the actual departure of people doesn't really lead to any negative outcome, which really surprises me...I've now managed a few people leaving and new people coming in, and the organisation seemed to be stronger and much more flexible than the individuals” (Interview 34)

5.3.3. Opportunities to contribute domain

- **Job design and autonomy**

Manager- staff and team

Communication around everyday tasks and jobs is quick, open and straightforward between managers and their direct reports. There are also team meetings for the academic services team (the largest team in the organisation) every week (Interview 34). For example:

“I have good communication with my manager. We generally get along quite well and if I have issues I certainly make him aware of them. I know that he, within the constraints, will try to do what he can to address that situation” (Interview 39)

After the 2011-2012 restructuring, the strategic level has been making attempts to keep communication of decision-making transparent (Interview 32). One informant acknowledges that although there are improvements, there still seems to be some secrecy surrounding the strategic level’s decisions:

“(Communication in this company) is better than it was, but there’s still a bit of secrecy...things are sort of leaked out little by little and it’s not so transparent, but it’s getting better...It’s between the management and staff. Within us it’s fine, we talk about everything” (Interview 39)

There are also some confusion and miscommunication between staff members and management regarding performance management. One SMT member explains that everyone received 100% bonus in 2011 because everyone’s goals changed, but one informant mentions that he is confused about why everyone received 100% bonus in 2011:

“When we did our bonus review at the beginning of this year for that previous year, there was no way to measure, because we changed everybody’s goals. We changed the whole organisation, so we paid everybody 100% bonus” (Interview 36)

“Especially in 2011, everybody got 100% of their bonus for tier one, but nobody got a bonus for tier two. (It) doesn’t make sense when you think about it. If people got 100% of their bonus for tier one, why wouldn’t that mean [the company] was a great success and would have achieved their KPIs for tier two?” (Interview 46)

Company-wide

As all staff members are located in office rooms on the same level and there are often meetings over coffee, company-wide communication is relatively effective. One informant suggests:

“There’s a coffee culture in this office too, and that’s great because you tend to hear about everything that’s going on and you can ask things in that, and that’s formally encouraged as well. It’s very much open communications, which has been the key” (Interview 41)

The organisation is also planning to renovate the office space so that it becomes open-plan in the short term, and there is a working group working on this change (Interviews 34 and 35). The CEO first came up with this idea and has since then gone through consultation with all staff members. Some people understand and welcome the change to open-plan office while others do not agree with the idea:

“I’m used to open-plan offices so I can’t wait for them to change it...(Changes) have all been via consultation, but I think it’s needed. There are some people that don’t agree with it, but they’ll come around” (Interview 43)

One informant points out that having an open-plan office will bring challenges to those who need to work in a quiet space and feels that the decision itself reflects how control is top-down and staff members do not have a real say in it:

“The idea with an open-office plan...is one of the silliest things I’ve ever heard of...People now close their doors when they are working by themselves. So you have to ask yourself the question “why would people close their doors now, working by themselves?”...They had sort of a meeting with [the company’s] people, the board had meeting with senior management, and I don’t think that was very successful in terms of resolving anything, because people are just resigned to the fact that it’s going to happen. Whatever they say will make no difference. It’s probably the best if they don’t say anything because they will be singled out as not being cooperative. You know, just making ways, causing problems...so most people wouldn’t say anything much” (Interview 46)

Meetings

The staff members have to attend numerous team meetings, including those for functional teams, project teams, and various working groups (Interviews 41 and 43). One-on-one individual meetings with the line manager can be more casual and may not take place on a regular basis for some staff (Interviews 37, 40, 41, 43, 45, 47 and 48). The functional team meetings (operations division and support division) are open to members from other divisions as well (Interviews 35, 44 and 49). As there is not a meeting space in the office itself, team meetings take place in other parts of the building.

There are also whole company meetings every month, where the CEO gives an update and staff members get together for biscuits and drinks afterwards (Interview 50). One

informant observes that people are getting more willing to stay for the drinks and have conversations since the recent restructuring.

“Judging the morale of the company, a key indicator has been the all-staff meeting and the drinks afterwards. We used to do this several years ago, and it was a meeting where people were told things, and they listened and there’d be drinks and everybody would be gone within five minutes. No one would stay. Now there’s lively conversation with people sticking around...as an informal judgement of the morale it’s getting more positive” (Interview 32)

The restructuring and the changes that need to be made have made it necessary to have frequent, regular meetings (Interview 44), but currently everyone is already trying to decrease the time spent in meetings through streamlining and decreasing administrative processes, as spending more time in meetings means less time at work (Interview 39).

Autonomy and job-related decision-making

As part of the restructuring, one of the organisation’s new key focuses is to increase staff autonomy and authority. One strategic team member expresses that:

“I don’t want to sit here problem-solving...which is the trap many senior managers have fallen into. They want to be viewed as the biggest brain in the building and they want to be the smartest person in the room...and that’s just a recipe for disaster, because I don’t think I’m the smartest person in the place at all, and the people who work on the project are better positioned to be able to tell me what to do and I would see my job as being to ask some questions...It’s a culture of autonomy. It’s a culture of collaboration. It’s a culture of getting stuff done” (Interview 51)

The processes of revising company goals and evaluating each member’s job description reflect a high-involvement model. Every staff member contributes to the revision of their job descriptions and every working group contributes to the reform of the organisation. A strategic team member describes:

“When we went through the process of redesigning everyone’s job description, everyone had input into that. It’s been quite an organic process and that’s the process that works well because we establish Working Groups to come up with the initiatives...everyone has been involved in the communication and the direction that the company is taking” (Interview 35)

Staff members’ commentary also confirms relatively high levels of job autonomy within their job boundaries (Interviews 37, 38, 43, 45, 47, 48 and 50). For example:

“Usually I’ll make the decision and seek support or ratification afterwards. It depends on the business. If it is a very large agreement negotiation, I might just run

it past a senior member, just to get their support, make sure I'm on the right track...but generally I think I've been in the game long enough to know what the right decision is, and I'm pretty sure my colleagues trust me to make right decisions at those times" (Interview 37)

Work-condition flexibility

The company provides extremely high work condition flexibility in terms of place and hours of work. The management team is interested in the outcome rather than whether the staff members are in the office or not. One person mentions that work condition flexibility is also something that a lot of candidates ask for during recruitment and selection, and it is good that the company offers it (Interview 38). One informant puts it thus:

"It's pretty flexible, it's good. I find that I work a lot more hours than I'm supposed to, just because I need to, but it's good as sometimes I do need to leave the office early or I've got the option to work from home whenever I want to. It can be accommodated, which is really good" (Interview 37)

The organisation has just implemented a link-management system that shares everyone's schedule with others in the organisation. This allows staff members to remain contactable when they are out in the field, which will more often be the case for BDMs (Interviews 34 and 35).

- **Staff involvement**

Although the company's decision-making was described as highly centralised prior to the recent restructuring, one informant's description still reflects a certain degree of bottom-up initiative. For example, one of the current teams was set up via the recommendation and planning of a staff member:

"We didn't have a real marketing function 2.5 years ago and [one staff member] recommended to the CEO that we get one, and [he] presented a paper to the board directly. The board's response was "Ok, if you are so keen on doing this" (Interview 44)

After the restructuring, the strategic level (primarily the CEO) implemented a high-involvement model for all staff. As previously described, employees are not only involved in revising their own job description and determining their job contents, but are also included in strategic discussions of the company's changes and initiatives and the actual process of making these changes through the working groups. The strategic level also endeavours to make decision and feedback transparent through CEO reports in the monthly company meetings and circulation of board reports to all staff:

“Under the current management, they do try and be inclusive and transparent. They circulate the board report to everyone. That has never happened before...Everyone got their (say) on what they thought, what they wanted, what they like, what they didn’t like, and then comment on the design when it came out...so they have been doing an inclusive thing” (Interview 50)

5.4. Employee perceptions as HR outcome

5.4.1. Employee appraisal

Staff members’ perspectives of the company

Staff members’ perspectives and feedback on the company’s HR activities are largely positive. For example:

“Any change is always good in my opinion, so the fact that they are trying to achieve some change is good...I think the big example is making the place open-plan and making it important bringing in different initiatives like getting students involved and things like that. I think it’s great, it’s all positive” (Interview 43)

However, while most people provided positive comments, there are still some who implied that there are staff members who have complaints or are unhappy. One informant points out that the culture survey which was run early 2012 reflects problems with the company. A few staff members did not take place in the survey and there were also another few who did not take the survey seriously and responded inappropriately (Interview 33).

Another informant also reflects on this particular survey:

“The survey was anonymous, but everyone saw the comments that couldn’t be attributed to, I guess we can work some of them out...I was surprised that when I read through the comments...I was surprised by...the negative comments were more than I expected and the positive comments were less. There was more whinging than I thought, than I would have guessed” (Interview 50)

The SMT is supposed to rectify the survey results very soon:

“If there are issues that arise out of the satisfaction survey, it’s up to us as the management team to rectify this. Essentially I would come up with strategies to put towards the management team, the management team will rectify it and we would take it to the staff and say “if we do this, does it solve the issue for you”...and if we get that right, by the next satisfaction survey we should see the increase in their satisfaction” (Interview 35)

The strategic level is well aware of the negative voices in the company, and is trying to address remaining issues in the organisation by reviewing existing practices (e.g. training

assessment needs, performance appraisal and remuneration) and organise activities like team-building days.

“There is probably one or two (who are not performing as well), but I think you’ll find that in every office...but for the most part I would be comfortable in saying that most people like the people they work with...The thing that we probably battle for at the moment is trust issue from the past. That’s why we’ve got things like team-building days, and focusing particularly on culture and staff satisfaction” (Interview 35)

There is also evidence for some minor culture and attitude clashes among the staff members. As the restructuring has only taken place recently, there are still some issues with change management and disagreements on various aspects of HR (OD) areas. For example, one informant believes that the managers are in charge of motivating staff members (Interview 48), while others suggest that employees can only be self-motivated (Interviews 34 and 43). Also, there are quite distinct differences between a few senior members, who have been through many organisation changes and have a stronger view on issues within the company, and other staff who joined more recently.

Nevertheless, despite these minor attitude clashes, interaction between most staff members appears to be positive and there is quite a bit of joking among male employees. For example, one informant mentions his colleagues, who are also in the office during the interview:

“Another thing they have done is put me in a room with these two cheeky characters (one person turns around from his computer and made a face)...They are relatively new as well, but I guess one of the reasons is they’ve probably already asked a lot of the questions I want to ask. So they’ve reluctantly (laughs) been a bit of a sounding board for me, which has been good” (Interview 41)

Judging from the strategic level’s awareness of complaints, willingness to accept feedback and make changes, as well as the growing fit between the organisation’s strategic goals and HR activities, there is reason to believe that employees’ appraisal of the organisation and its HRM will become increasingly positive if current trends and approach continue.

5.5. Chapter summary

Section 5.2 shows that the recent change in organisational strategy has significantly affected the HR (OD) function. The organisational strategy shifts from focusing on generating income to focusing on relationship-building, publicity and knowledge-exchange.

Correspondingly, the company is transforming its administrative, efficiency and process-focused human resources function to an organisational development function that attempts to better develop employee talents and organisational culture for more innovative capacity. However, the actual role of the OD manager still needs to be further justified as a lot of HR changes or decisions so far are results of direct negotiation between staff members and the strategic level (bypassing the OD manager). The new high-involvement and high-engagement approach is also a strategic level (particularly CEO-initiated) decision, and the actual responsibility of the OD manager so far still remains relatively process-based.

The relatively small size of this company is one main advantage in terms of the company's HRM as it also allows effective communication and efficient implementation of the new high-involvement model. Since the 2011-2012 restructuring, a number of HR procedures (e.g. induction) have been formalised and standardised, while another few activities (e.g. performance appraisal and remuneration) are still under revision. It is evident that the organisation is implementing HR standards and making changes in conjunction with the new strategy. This increases the likelihood that the HR architecture will conform to the strategic level's intended organisational climate. Interestingly, despite these changes and improvements, there is not much evidence for a strong HR/ OD function with high strategic status. Although the OD manager is playing an assisting role in HR-related changes and providing suggestions for various activities, it is clear the CEO is the main person driving the paradigm shift in management approach and the working groups (i.e. staff members collectively) or the whole SMT is behind most of the process revisions. In other words, the high-involvement model has, to some extent, decreased the strategic significance of the organisation's HR function.

The next chapter presents the empirical research findings for UCO Three.

Summary table for UCO Two

Strategic goals	<ul style="list-style-type: none"> • To enhance relationship-building, university research publicity and knowledge-exchange
Organisational control structure	<ul style="list-style-type: none"> • High-involvement model that focuses on staff autonomy and flexibility • Matrix structure. There are two functional divisions: operations and support, each with has numerous teams. There are also numerous cross-functional working groups and project teams that are formed and dismissed as required by internal and external projects.
Measurement of performance	<ul style="list-style-type: none"> • Providing valued service to academic community, building positive external perception (short to mid-term) and bringing in financial returns from intellectual property (long-term)
Strategic HRM presence	<ul style="list-style-type: none"> • 1 HR/OD manager supporting 31 staff members • HR is a valued area and SMT acknowledges its strategic importance. However most recent HR-related changes driven by CEO, by SMT collectively or by staff members, rather than the OD manager • Some confusion over “who holds HR responsibility”.
HRM system coherence	<ul style="list-style-type: none"> • Improving. Currently in the process of better aligning HR practices with intended organisational outcomes. Performance appraisal, remuneration and development needs assessment still under revision
Intended HR outcome	<ul style="list-style-type: none"> • Innovativeness, flexibility and taking initiative • Professionalism in service provided • Openness and transparency in communication, as well as teamwork and collaboration
Strategic-implementation alignment	<ul style="list-style-type: none"> • Small organisation size, proximity and matrix structure allow efficient and effective communication, which enhances alignment
Key organisational challenges	<ul style="list-style-type: none"> • Companies need to be willing to invest in early-stage research for the model to succeed • University promotion system needs to better encourage academics to engage in commercialisation for the company to prosper
Key HR challenges	<ul style="list-style-type: none"> • Issues with expectation management after organisational restructuring • Some trust issues still need to be addressed

Table 5.1: Summary table for UCO Two

CHAPTER SIX: UCO THREE “THE MONEY-MAKER”

6.1. Organisational History and Structure

Established over 20 years ago, UCO Three has 85 staff members working at the corporate office (i.e. in its commercialisation arm). It also collaborates with over twenty research centres that are spread throughout the country and it administrates the legal, financial and HR affairs for some of these research centres. Therefore commercial outcomes can be delivered by either university academics or research centre staff. According to its corporate website, the company currently has over 1,500 projects in progress and its achievements cover areas that range from clean energy, materials, electronics, to health, medicine and education. In year 2011, the company contributed a revenue equivalent to over one million USD to the university.

The company has experienced significant and relatively stable growth in the past 25 years, which has primarily been a result of clear university direction (Interview 64). It reports to the Council of the university and is granted the delegate authority by the Council. The Council’s interests are represented by the board, and the board receives a company report every two months (Interview 79). The board consists of five university executive members and five members with corporate backgrounds. According to one informant:

“Boards worry about governance, they worry about actual versus budget, but the sort of day-to-day strategy making such as how are we going to get more money...is really a CEO and project management thing. Not really a broad thing”
(Interview 59)

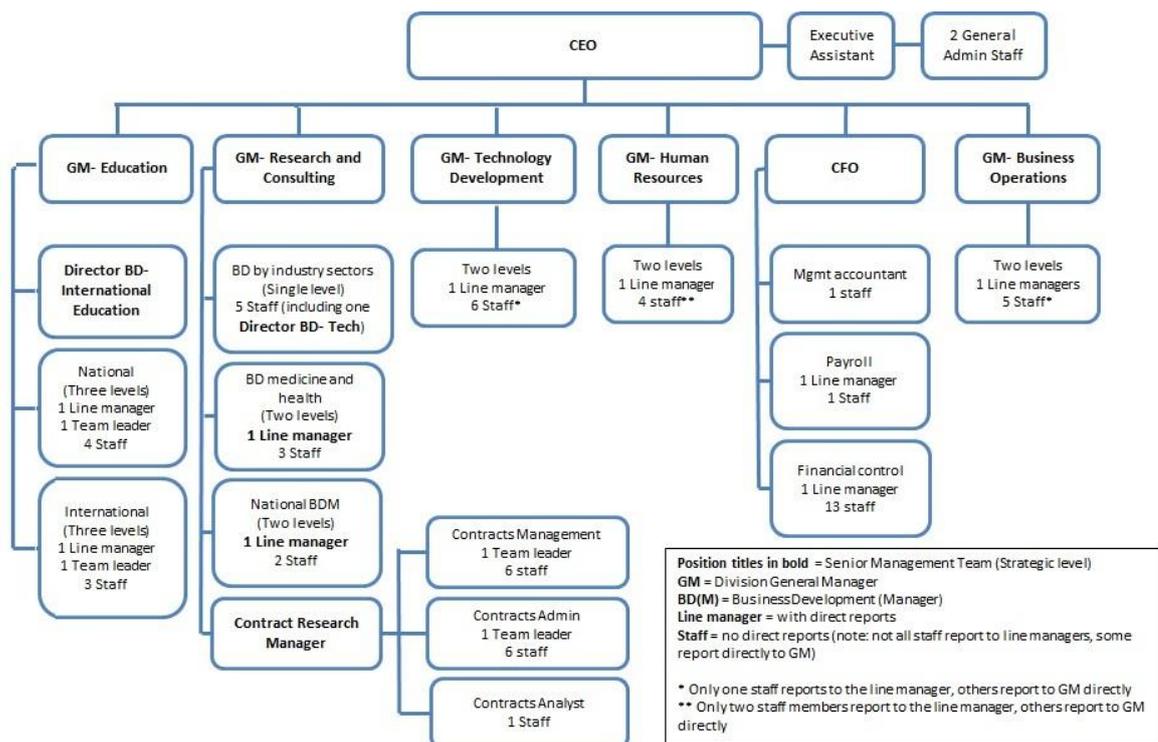
The organisation’s corporate office is divided into six different divisions, including three revenue-generating business areas and three business-support divisions. The operations of the company are managed by a senior management team (SMT) that consists of the CEO, the general manager (GM) of each division, three line managers and two business development (BD) directors (see Figure 6.1). Most of the GMs have been in the organisation for a long time, have worked under different CEOs and are extremely familiar with the organisation’s history, structure and strategic directions.

UCO Three’s employees are all on individual employment contracts (Interview 84). The male to female ratio in the organisation’s corporate office is around 3:5. Gender spread is relatively even across every division. Four of the ten SMT members are female.

The organisation's corporate office is situated in a building in the university's main campus. A number of engineering and science departments and research institutes are also located, or have office rooms, in the same building. The UCO is spread across the three top floors largely based on company divisions. For example, the whole HR division is located on one level and the whole Business Operations division, Finance and Accounting division and Contract Education division are located on another level. There is a reception space that receives many visitors (most of whom have a prior appointment with the staff members) throughout the day.

Although this UCO's HR function also looks after a few research centres' HR matters, this thesis only focuses on HR activities within the corporate office. The geographic spread of these research centres does not have significant implications for the HR function's operations.

Figure 6.1: Organisation chart for UCO Three



Commercial service delivery (revenue-generating) divisions

- ***Technology development:*** deals with the commercialisation of IP mainly through patenting and licensing.
- ***Contract education:*** customises and designs education programs for delivery to external clients, both domestically and internationally.
- ***Commercial research and consulting:*** coordinates commercial research and consultancy projects and liaises between academic and business clients. The division is split into contract research team, national science and technology business development team and medicine and health business development team. There is also a number of business development managers who report directly to the general manager.

Corporate support divisions

- ***Business Operations:*** manages company IT and communication. Business, systems and operations analysts also belong to this division.
- ***Human Resources:*** provides the company with HR support.
- ***Finance and accounting:*** manages company financial accounts. Division split into payroll team and accounts team (one line manager each).

Education is currently the fastest growing area in the company, having achieved 44% increase in revenue in 2011. This growth began in 2008 (Interview 69). However, at the moment Contract Research brings in most of the organisation's revenue, about 50%. Technology Development and Contract Education are each responsible for 25% (Interview 79)

Recently, a number of roles have been restructured and shifted from university-facing to client-facing. This represents the organisation's intention to better serve business clients' needs:

“The idea of having somebody across the whole university at one particular sector is relatively new...in the past the BMs has been associating more with faculties...someone for each area, someone for business, someone for medicine. We still have that to a certain extent, but there's more and more of these cross-university, or we call sector-facing roles...having it chopped-up by faculty is a very internally university-focused way of looking at it...Working across the university,

you want to assemble these cross-functional teams because that's the power of what we're offering our customers" (Interview 76)

The roles of these managers are both proactive and reactive. Roughly 70% of the role is to seek actively new business opportunities, and 30% of the role entails reacting to clients that approach the UCO (Interview 76). According to informants' descriptions, the nature of the commercialisation managers' roles is more business-oriented rather than technology-oriented and the BDMs consider their jobs to be more commercial than academic. For example:

"We're here selling the power of the university to do research that is helpful for business and helpful to government- local, domestic and international. So one view is this is sales-marketing...it is so specialised, it is paradigm-breaking to be selling research" (Interview 70)

6.2. From commercialisation strategy to HR strategy

6.2.1. Organisational strategy

The key strategic objective of the company is to grow financially and increase its return to the university, a fact that is acknowledged and confirmed by multiple informants. For example:

"(The company's goal is to) make money, make money for the university. We'll generate revenue and exploit intellectual property" (Interview 59)

"It's growth. The main driver is in the stretch goal that [the company] set is to double our revenue by 2020...There's no one layer describing the company's overall strategy, but it's certainly to grow" (Interview 72)

However, the organisation is currently struggling to keep up with its revenue and growth targets due to limited domestic market capacity, cuts in government funding and international recession (Interview 53). Therefore, this organisation is pushing to achieve its growth by accessing more international markets.

"...the strategy is to target certain business areas- international business is a big one, there's only so much growth that's sustainable within [this country], so certainly international business is a focus" (Interview 72)

The process of developing the organisation's strategy occurs mostly at the company's executive level. The SMT goes on a retreat for one day with an agenda set to reflect on key challenges and discussion of how the UCO and its strategy can be changed to address these issues. The outcome of this discussion then determines the company's strategy. Revenue

targets are initiated by a bottom-up process (with input from each division), but it is the board that makes the final decision (Interview 79).

Organisational performance

In line with its strategic goal, the organisation believes that it is performing well by the measures of overall revenue, numbers of patents, numbers of IP protection, number of spin-outs, number of licenses, volume of contract research and number of university staff engaged with commercial process (Interviews 79 and 85).

The reason for such success, especially in financial terms, it is suggested, is because of the structure of the organisation. Having research staff on the company's payroll and structural stability allowed for such growth.

"...(many of) the people, who do work for the contracts, are on our payrolls. We have a lot more influence on the people who are doing the work than a traditional university who didn't have that structure. In doing so, it helps the business feeling more comfortable that they will get the results they contracted for and the staff that are working on their contract are not part time or distracted by other interests...We've been stable for 25 years. That structure hasn't changed, so we have not had to reinvent ourselves, we haven't had those disruptions which many of our peer universities have had to do. Stability is very important" (Interview 79)

Another factor that has contributed to the organisation's achievements is faculty involvement. Although the number of staff engaged in commercial activities is still a small proportion of the university population, this is already relatively high in comparison to other universities in this region (Interview 79). This UCO works with approximately 500 academics from the university, and most of the revenue come from 100 academics. "Those 100, if you like, understand who we are; they want to work with us because they see the benefits" (Interview 60). Building on its achievements, the company has gained a positive reputation, which further facilitates business engagement and reinforces the trust between the commercial partner and the university (Interview 78).

The University

Despite the close link between the organisation and the university, the environments for the two institutions are different. The standard process in the UCO resembles a "commercial process" that focuses on commercial value and profit, whereas in the university it can be more of an "intellectual" or knowledge-seeking focus (Interview 60). In this case, there may be potential conflicts.

“...that’s right where we are, being the interface between the commercial world and academic world...All the time we are balancing the academic needs and drivers with the commercial needs and drivers and there’s always a bit of a clash” (Interview 72)

According to this UCO staff member, one main factor that motivates the university’s academics to engage in commercial activities is the access to funding.

“In recent years it’s getting harder and harder for scientists, engineers and medics- where most money is coming from- to access traditional sources of grant revenue. So academics or deans will be keen to balance their budgets and the revenue and the overhead accounts from contracts...so it’s moved very much towards the North American model” (Interview 59)

Another one is the possibility for commercialisation activities, which feed into promotion.

“Well of course nobody is going to write a letter and say if you get this contract you’ll get promoted, but yes, promotion is considered out of three categories: scholarly output, service and teaching, and part of certainly scholarly output and service stuff is winning grants and contracts and generating overheads and so forth” (Interview 59)

6.2.2. Key organisational challenges

Government funding: Around 45% of the organisation’s research projects come through government funding. As government funding becomes highly contested, there is a significant impact on the company’s revenue (Interview 67). The government spends less than 1.5% of the total GDP on research, which is around half of the 2.8% OECD average. This means that the university can only achieve incremental growth if it were to depend on this source of funding (Interview 78). In addition, with the current government funding structure, universities need to compete against state-owned research institutes and government departments (Interview 66). Nevertheless, this also means that there is more impetus for the university and its academics to become involved in commercialisation activities, especially at an international level (Interview 78).

Lack of large businesses and entrepreneurs: Larger companies are more effective partners for UCOs, as they are more likely to be able to afford to invest in research (Interview 76). However, the nation is rather limited in domestic commercial activities, meaning that there are relatively few entrepreneurs, business people and individual companies able to understand the process of taking IP and making it products (Interview 73). This makes it more important for this UCO to expand its networks and activities internationally (Interview 72).

Academic Independence and Freedom: The main difference between UCOs and other research consultancies is that the university academic researchers are not employed by UCOs. This means that the UCO cannot provide business clients with same levels of guarantee, warranties and liabilities that a commercial company can, and the quality of service delivered by the UCO is highly dependent on the skill of the individual academics and the time frame that the individual can deliver to, considering the academics may be giving priority to teaching and supervision. Although this UCO tries to deliver commercial outcomes, it does not have the commercial means to guarantee achievement of this intention (Interviews 60, 70 and 76). One way to mitigate this problem, as one informant describes, is to engage academics early on:

“If we formulated an exact description...and took along to professor X and said “here you are would you like to do this?”, the answer would be “I’m a bit too busy”. In other words it would be a not-invented-here syndrome really...so it’s very important that we engage our academics leaders at the earliest possible moment in the life course of a project” (Interview 70)

Communication style difference: Another challenge is to manage differences in communication style between academics and business clients:

“Our academics are far too obsessed by what they do, and how they will do things, what processes they will use to do the research by, the clients of course just want results. They want to understand that the academics have a strategy to solve it, but they don’t really need to know in depth what that process is...It’s very good practice to have a pre-meeting...and to have an agreement as to who will do what in a broad sense and not get into too much technology depth” (Interview 70)

Internal challenges: There are also two internal organisational challenges. Although the company has launched initiatives such as a magazine, putting on showcases for academics and inviting companies for discussions to increase public awareness of its activities, two informants still mention that marketing and communication are among the weaker strategic aspects at this stage. For example, one of the two says:

“...when I first came here, “brand” was a dirty word- they didn’t think that was important...the university is very conservative...and [the company], I mean, it’s getting better, they’re starting to open to ideas, they now see brand and how you position yourself in the market is quite important...it’s a huge change, it’s a huge mind set shift, but they’re slowly getting there” (Interview 66)

In addition, one informant points out that there is not a formal feedback loop that communicates customers’ comments on issues such as quality of the deliverables or ease

with which people can work with the UCO, both external (business clients) and internal (academics). This UCO's strategic plan and objectives do not focus on operational effectiveness or customer delivery (Interview 68). This informant sees that the issue resides at the strategic level:

“I've been in places where...they've got a strong vision of say customer service initiative they want to achieve- it's coming from the top, but here it tends to come from the bottom-up...we seem to achieve a lot from the bottom-up, that's all I can say...We tried to organise a client-satisfaction survey two years ago and the senior managers wouldn't buy it. They said they already knew what the clients thought. We found that really disturbing actually...That was quite alarming...I think some of the SMT was ok with it, but perhaps one or two weren't, and they had louder voices...I don't know what we're scared of finding out. To me they're all just opportunities for improvement” (Interview 68)

6.2.3. Human Resource Strategy

The HR division became a strategic division in 2008. The decision was made by the CEO, but with input from the HR consultant, who had been working with executive team and one of the GMs. Prior to 2008 the HR division was administration-bound, only had two people and reported into one of the GMs (Interview 53). Currently, the main goal of the HR function is to retain and develop top talent (Interview 73), help achieve operational excellence, and ensure fairness and transparency (Interview 58).

HR team as “business partners” rather than administration

The HR team is referred to as “business partners” and the team members have job titles including HR business partner and HR advisor rather than more traditional titles such as HR manager or HR administrator. Currently it is still a relatively small team in comparison to other divisions, yet the division is understood to be effective and its members are respected. HR team members clearly take pride in their work and roles within the organisation:

“I think in other companies the HR teams are not necessarily taken too seriously...I think just being professional and we have definitely established that as a team in this business. You can see it when you talk to managers that they actually listen to you and they take on board what you say, rather than thinking that they (just) have to listen and do whatever they want” (Interview 64)

In order to facilitate better the partnership model, the HR team is broken down to look after particular project areas. For example, one HR business partner looks after education, and

this person catches up regularly with the GM of education to see how the education division can be better supported regarding HR issues (Interview 57).

“Each of (the HR) team (member) has different areas of business that they support. Like account manager type setup. Sometimes one senior member and one junior team member support one team” (Interview 53)

Other staff members also confirm the partnership rather than managerial nature of the HR team. One line manager describes:

“The HR division is here to support us in making sure that we have skills within our team members to achieve the strategic drive of the company...we require the HR support in doing that...I would rely on their advice, particularly disciplinary-type scenarios...the HR team doesn't know what my team does. They don't know the volume of the work. They're not involved to that level to know that” (Interview 67)

HR strategy

The HR strategy is aligned to support the organisational strategy. This means that it is important for the HR strategy to be pragmatic and responsive to shifts in the organisational strategy. Currently, the HR strategy is to support the business in its revenue growth through a number of capacity development initiatives:

“...our revenue target is to double our revenue again by 2020. So HR strategy is around supporting the business through a number of initiatives such as talent building capability leadership development...to ensure that those targets are met” (Interview 53)

“This is a pretty pragmatic company. It's not coming in with a “this is what we need to be doing from the best practices of HR”. We need to be quite responsive to what the business is actually asking for, what they need...definitely a strong alignment with company strategy” (Interview 71)

The formulation of HR strategy begins at the beginning of the year when the GM HR brings back to the HR team the organisation's key priorities of the year after the corporate strategic planning round. The HR team then organises a planning day, discuss what HR is going to focus on for the year and decide on which person is going to look after which areas (Interview 64). The GM HR works with line managers, making sure that the developed initiatives are aligned with the groups' needs and interests. There is also a long-range planning process every three or four years. Therefore, the annual HR planning process will also take into account the company's long-range goals (Interview 71). As a

result, an HR strategy that responds to the organisational strategy will be formulated and presented to the SMT to be endorsed (Interview 79).

“We see every year an annual budget...and that budget includes some opportunities for all four of those investment opportunities: people, infrastructure, investment and training of staff... Those are often quite robust discussions because you will have people from different parts of the company, who manage different teams, lobbying for their own strategic needs around growing the business. They will then see whether or not the opportunity presented by other managers actually takes priority over theirs” (Interview 78)

The HR strategy may aim to enhance certain staff members’ capabilities, foster more collaboration between the teams and divisions, or develop leadership (Interview 53). In addition, the HR team is also working with managers and their teams to look at how employee involvement can be increased as a key business goal (Interview 57). With the current CEO retiring and a new CEO coming in 2013, it is possible that there will be changes in organisational strategy and therefore HR strategy revision (Interview 53).

HR matters are reported during board meetings, but GM HR only attends the board meetings when particular HR aspects need to be explained. Issues including health and safety, personal grievances, new hires, new senior hires and resignations at senior level are always briefed in the board meetings (Interview 53). One informant points out that this is necessary as “HR is always critical in any organisation” (Interview 85).

Intended climate and culture

HR team members explain that it is the role of the line manager (and team members) to create the climate in their teams. The HR team supports the climate-creation process, yet it does not create the culture.

“I think you need to be careful with this one, because HR doesn’t create the culture, managers do. HR supports it. That’s really important because HR doesn’t “own” culture... we engage an external company to survey all our staff around standard questions. They are benchmarked around each unit and also externally. And then each business unit gets their own results to work on...that’s where HR supports each unit in understanding their result and what’s needed to do with them and what to focus on. Because we’ve got all these units I don’t think it’s about creating one culture. It’s about addressing whatever that’s been highlighted in the survey for that particular unit” (Interview 53)

One staff member also confirms this view by describing how the culture is something that developed naturally and no one is really fostering or driving it:

“There’s a lot of people who are really enthusiastic and proud to work for [the company] and the [university], but I don’t see that has been enough of a culture to say that’s what we’ve achieved. I’d say there’s certainly aspiration to be there...I mean I’ve got in my folder right now our values and mission and our vision and I couldn’t tell you what they are...and that’s partly because there’s pages of it, and it’s not how you should try and create a culture and have people believe in your values and missions...I don’t know whether HR drives a lot of that either, it’s about process, it’s about ensuring that you know how we work and what we need to do, but I don’t see the culture driven by HR, it’s not driven by anyone” (Interview 58)

The organisation’s staff members clearly acknowledge that each team has a different climate:

“(My manager) is really operationally-involved as well as sales-focused...The (other) team is very different from that. Their current manager is very micromanagement-focused...Every team has its own thing, and we have a few people who switch team because of that...they’re very different” (Interview 69)

“We have different climates and cultures in our different areas, and I think that’s because we have such distinct areas...it’s very hard to say “we’re going to have one culture and one set of value across all the different areas”...There can be a deliberate aspect of developing culture, but a lot of it develops organically, and it’s about the way people interact with each other...That’s where true culture comes from, as opposed to the HR team or the management team saying that’s what we’re going to have here” (Interview 71)

Team work

A number of informants describe their team climate as one that focuses on team work, primarily because the nature of the job at times requires a sharing of workload. For example:

“We try and work together as a team...so if there’s a challenging person who we have to deal with, there’s an opportunity for us to say “oh I’ve dealt with him or her before, this is what you can probably try with this person”, as well as having fun” (Interview 65)

In contrast, one informant from a business-support team describes her division as “a group of individuals”, not like “an integrated team per se”:

“(Our manager) just lets us do what we want to do, do what we think we need to do...We sort of do our own thing; it’s not like everything we report to our manager or comes through to her, because we report to other people” (Interview 66)

Customer-service/ relationship maintenance

Some informants mention a climate that emphasises customer service and relationship maintenance. For example:

“Customer-focused and service orientated would be top of the list. We wouldn’t exist without the university and with our client paying for research and consultancy. We’re here to provide a service. I try to remind people this is what we’re here to do” (Interview 60)

“If you’re working well with the HoDs, they know what you’re doing, you know what they’re doing, they can tell you if new people have been brought in, new technologies that come through. For us, good relationship with the university is the key” (Interview 62)

Professionalism

Other informants describe professionalism as an important team quality (Interviews 64 and 76), driven both from the top and by the staff. For example:

“(Professionalism is) definitely (encouraged) from the top...through training and (having a GM) being really on board with what we’re doing day-to-day, what managers we’re talking to, what we’re saying. It’s not micromanaging; it’s just making sure that she is aware of how we’re doing our jobs” (Interview 64)

“The culture is that we all expect that we’re professional in what we do and we help people out...The culture is driven by the staff. It’s driven by a whole bunch of very professional people who have done this before in a number of different organisations, so we know the best things that work, and the things that don’t work, and then get together and self-organise” (Interview 76)

Corporate climate

At the company level, there is a number of broader goals that HR tries to achieve jointly with managers in order to foster a positive work environment. Although not explicitly stated in company values, the broad corporate climate and encouraged behaviour are described as “willing to help each other (Interview 70); “fun environment” (Interview 68); “commercial”; “social and engagement with each other” (Interview 71); “integrity and honesty”; and “innovation and development” (Interview 72).

6.3. HR architecture and efficacy

6.3.1. Knowledge, skills and abilities domain

- **Recruitment**

HR Planning

New roles at the organisation's corporate office may be created as a result of business analyst and senior management evaluation of corporate needs or as a result of manager recommendation (Interview 60). Job descriptions are often written jointly by the line manager and HR team member(s). The process of creating a new role begins by manager recommendation and GM HR's confirmation that both the position and budget are approved. The line manager will then work with HR to come up with the job description and a remuneration specialist to decide on the remuneration (Interview 53).

The HR team reviews corporate staff members' roles once a year and evaluate whether the role has changed. This process is more standard and straightforward for the junior roles. At the more senior level the staff members might be involved in an interview with an external HR specialist company as part of the review process (Interview 53).

Talent Management

There is an annual HR process that the organisation goes through, where, as a group, senior managers and HR will look at all staff members on a three by three (high, medium and low performance by high, medium and low potential) matrix of performance relative to staff members' potential.

“We do have people who do their jobs well, but they haven't got a whole heap of potential to move beyond that... It's not that they get ignored. It's just approaching them in a different way from the high potential people. One thing this process does is that it identifies or brings to the surface people who don't make the great- you know, they're not performing- it can result in a process to management them or help lift their performance, which is also necessary in organisation life” (Interview 71).

Staff members won't find out about the talent assessment result “at a granular level”, but managers are encouraged to give feedback about where people are sitting (Interview 71).

Recruitment channels

Junior or non-specialised roles are usually recruited through internet advertisements and specialised and senior roles are recruited through recruitment agencies or head-hunters.

Out of all the interviewed staff members, there is one special case of a business analyst, who joined the company through recommendation. In very rare cases recruitment can happen through word-of-mouth for corporate office positions.

“(Recruitment through word-of-mouth) can happen, most of the time it’s through advertising though. Generally we’d always advertise in the corporate office, and our staff might recommend people, but we want to make sure that we are getting the best candidate” (Interview 71).

The HR team’s role is to support the recruitment and selection process. Usually the direct manager will initiate the need to recruit someone and then HR will organise the processes (in collaboration with the manager) from that point on. The HR team will run the recruitment activities, organise job advertisements and interviews (Interviews 60 and 67). HR will also provide sample interview questions, which managers can then adapt or change. It is also the managers’ decision if they want to run a second or third interview.

- **Selection**

Phone screening/short-listing: Once the advertisement closes, either HR team members or line managers (more often HR team members) will then short-list the candidates via phone screening. If a recruitment agency is involved, the recruitment agency will provide the short-list. Phone screening is conducted to check applicants’ communication skills and expected salary levels, reasons for leaving a current role, and reasons for wanting this role. Around four candidates will be selected for interview (Interview 63).

Pre-interview meeting: For more senior positions, the GM may choose to have a pre-interview meeting with the candidates to ensure there is consensus with the expectations.

“I would typically meet with them for an hour in non-interview mode to talk about what we want, what they want and get a consensus...it’s not an interview but it’s informative...it’s just to establish for me “do I want to work with this person” (Interview 70)

One informant describes his pre-interview meeting:

“Before the formal interview they had an informal meeting with me...I think that was a very important and very valuable step in that I got to learn more about the role and their expectations, before I go into a formal interview...it helped me better prepare for the interview, but it also helped confirm that this role was something that I’d want to do, rather than wait until the end of the interview then decide” (Interview 60)

Interview(s): Most informants report having gone through two or more interviews. HR team members are usually more involved with the first interview, while the GM and senior members of the division are often in charge of the second and third interviews (Interviews 52, 54, 55 and 58). However there are also a few informants in more junior roles who have only had one interview (Interview 56). Depending on the position, some candidates will also meet some of the academics with whom the position will be working (Interview 55).

One informant explains that the focus of the interviews is:

“...all about what I had done...it was more competency-based...particularly team-fit was a very important criteria because there’s a certain culture here and although that culture needed to be changed slightly they didn’t want to be changed rapidly overnight and upset people or the university” (Interview 60).

Testing: The organisation contracts an agency to administer psychometric testing of their candidates. Testing has not been consistent in the past, as a few informants suggest that they did not go through a testing process when joining the organisation. However, the recruitment process has become more stringent in recent years. For example:

“Shortly after I joined the recruitment process became more rigorous...they added in like some psychology assessments and things like that, but I didn’t have to go through any of those when I joined. It was quite straightforward” (Interview 72)

Testing is one of the final stages as it is too expensive to test many people. Ideally, one preferred candidate will be invited to sit the test, but usually it can be up to three (Interview 71). Depending on the role, other than psychometric testing, candidates may also be invited to complete other tests such as budgeting exercises, sending example emails to clients (Interview 69) and written comprehension assessment (Interview 58). The significance of the testing stage is that it would often show areas that the company need to probe a bit more in the reference checking process (Interview 71).

Reference check: Once interviews and testing are complete, either the HR team or the line manager then conducts reference check for the selected candidate (Interview 54).

Meet-the-team: The selected candidate meets his or her future teammates over coffee. Team members have the opportunity to provide feedback on how they think the new person will fit in the team. A line manager says:

“We always tend to do that, because it’s important that the team- they need to cover each other at certain times- it’s very important they all work together” (Interview 67)

However, the manager will still be making the final decision (Interview 68).

Timeframe

Time taken to fill a role often depends on the notice period of the candidates. A position is normally advertised for two weeks; the interviews will run on the third week; on the fourth week the company will be making the job offer. It usually takes roughly two months to fill a role, as candidates often have one month notice period. For more senior roles, it may take up to three months or longer to fill (Interviews 53 and 63).

Selection criteria

A senior staff member acknowledges that UCOs, being an “unusual environment”, require people with a certain attitude:

“...we are recruiting people from outside the university, but we are working inside a university setting. Therefore there is some risk that someone coming into our organisation will not understand how it all works, have the wrong idea, get frustrated and leave. We are at some pains to make sure that they really do understand what our environment looks like” (Interview 70)

Most of the staff members come from backgrounds that are “overlapping, not identical” (Interview 52). Although it is not necessary for candidates to have connections with the university, the company prefers people who can understand universities (Interview 53).

“Typically...people generally come from three positions. We have scientists who become commercialisation people; we have patent attorney who become commercialisation people, and you have people who come from business. Each one brings different skill sets...a lot of the people who come from a business background tend to need to learn to work in a university environment, and learn that people are slightly different. Some of the behaviours, from a business point of view, are perverse” (Interview 73).

However, if this organisation has to make a decision between business background and academic background, candidates with a business experience are preferred:

“...if we have a preference then we would stand for the private sector and we can give them the university experience. Ideally if you have both and you come, but it’s a rare event” (Interview 79)

Although selection criteria are different for different positions, there is a number of selection guidelines applicable to all positions:

Team/ Organisation-fit

“Meeting the job criteria and a good fit with the organisation, because sometimes people might have all the right skills, but there’s something that they might not quite work with the team” (Interview 74)

Understanding and acceptance of university culture

“...perhaps the external stereotype of the university is strange and non-business like and just needs a “smart-cookie” to come in and sort it all out. Those “smart-cookies” burn and die. University has got a lot of smart cookies- they’re very different smart-cookies but they’re very smart, and they can outlive you...What people need to figure out is how to work with you, not sort you out...I suppose the biggest thing would be not understanding that you can go out and identify a fantastic opportunity...you take it to the university and no one wants it” (Interview 70)

Business experience

“That’s (business) what we do here...we are only recruiting people out of the business sector, because fundamentally we’re trying to bring a business perspective to the university...We have to hire people that are comfortable getting the broad idea, understanding how the technology fits what it can do for the client, without ever wanting or needing to be the expert, because someone in the university is the expert, our approach is team work” (Interview 70)

This UCO does not view post-graduate qualifications as an important selection criterion. Only two staff members from the corporate office have a PhD degree; 20% have post-graduate degree.

“...we’re looking for a degree and a relevant degree in most of our roles, but experience outweighs the postgrad. One of our staff member happens to have a PhD, but it’s not vital to have PhD for the role she does” (Interview 53)

Challenges

While informants accept that the organisation is trying to ensure rigour in their recruitment process, some feels that the process is time-consuming. For example, two informants describe the selection process as:

“...took a very long time, probably about 4.5 months. If I were looking for full time job, I would probably have taken another role. It was a very long process” (Interview 66)

“Long and torturous...I think they were just very careful” (Interview 52)

From the company’s perspective, they want to make sure that they are getting someone who has the right personality and skillset for this environment and the nature of the job:

“Recruitment plays a very important part in our service...If you don’t have the right personality and/ or experience, or resiliency for this environment, no training, no KPIs or rules are going to fix that problem” (Interview 60)

Regarding the testing process, one informant believes that in order to make the tests more effective, it is necessary to use the psychometric testing outcome by completing the feedback loop and match test results with employee performance:

“We do use psychometrics, but we don’t close the loop...there’s no feedback loop...I think what we need to do is use hindsight, going back and say “ok, we know our good people, let’s go back to their psychometrics and see what was there that told us that” ...I would say we are pretty unsophisticated...The good news is we know we are pretty unsophisticated about using these instruments, and we probably need anyway a more joined-up way of doing this” (Interview 70).

Some of the roles in UCOs can be difficult to fill due to its nature and the lack of understanding of these specialised roles:

“I think it’s quite a difficult role to recruit into...[this] is quite a niche area...my job requires a lot of negotiation skills, project management skills and financial skills, and those skills don’t often overlap with [this specialisation]...and I think when people see the job description and the level of the role, they’re quite daunted” (Interview 69)

- **Training**

Induction

Induction was one of the weaker areas identified by a recent business analysis (Interview 68). Since then the company enhanced this area and most of the informants are now giving positive feedback. Although this country’s legislation allows for a trial period, this organisation does not use the trial period (Interview 53).

For new staff members (including those from the research centres), there is a corporate induction session that is run every two or three months. All new staff members attend this session in the corporate office for about two hours. There is normally a presentation by one of the executive team members on the business. One HR team member will talk about HR, and then there will be a morning tea where new staff members get to meet and greet some people from the corporate office (Interview 53).

Line managers will introduce the new team member to the company divisions and key people and the new team member will receive an induction booklet. Induction also involves training on corporate systems such as the financial system (Interview 75).

“The induction was...very detailed, because they introduced me to every department and I’ve had a one-on-one with every head of the department, and they were actually talking to me about what their role is...so it was actually a very nice induction process” (Interview 54)

There will usually be a catch-up meeting with HR a few months after induction “just to see how everything is going, what I need to know further or how they can help me, learning the essential information” (Interview 56)

One aspect of induction that requires further attention is the handover between different teams during new staff members’ induction process.

“As far as I know, there are a few complaints about the handover between the other teams and HR ...I think there probably is a need to check the whole on-boarding process for an employee. I think we do drop the ball going along in time, and that’s probably because each of the groups involved don’t really understand what the other groups need...(These were) anecdotal information that I hear from the teams that complained about HR or HR complaining about them” (Interview 68)

Job-specific training

Job-specific training falls under the line manager’s responsibility.

“It’s for the business unit and the line manager to do the role induction with HR support. It’s not the HR do it all. It’s got to be manager-owned” (Interview 53).

Due to most roles being relatively specialised and the staff members usually being rather experienced, the most common training method is an extended handover period followed by on-the-job training. For example:

“Our projects don’t have a cookie-cutter version...everything we do is tailor-made, so while there are some processes that are the same, they don’t fit the same model with everybody else. It was a six-week induction program as such, quite heavily formatted at the beginning but then it decreased...pretty much on-the-job-training” (Interview 75)

For some roles (usually from the commercial service delivery divisions), training involves meeting and associating themselves with the key stakeholders outside the corporate office:

“...for most of our new (members) we have a 90-day plan...and it’s really trying to establish a clear prescription as to what we want...in the first 90 days you should have met the key leaders in your field., for example 30 of our academics. Another thing is they should have, by the end of the 90 days, identified and joined up with one or two relevant sectoral organisations” (Interview 70)

Peer support can also play a key role in the learning process, depending on the team:

“The team environment that I went into was one that everyone knew what everyone else was doing and working on anyway, so although there wasn’t someone that left that would give me a handover, there was certainly people there that were very knowledgeable around stuff that I was supposed to be doing” (Interview 72)

- **Development**

Development programs

There is general acknowledgement that development is taken very seriously and greatly encouraged in the organisation. As one informant describes, “It is a really important part of working here, that you go and learn some stuff” (Interview 52).

One HR team member is in charge of the learning and development function. This member works with managers around what sorts of learning and development programs may be applicable, suitable and available, and there is a budget allocated for that purpose (Interview 53). Managers and executive teams support such initiatives as long as the program is work-related.

“I think they were trying hard when I joined and they are trying even harder now...courses set up for new staff...there has always been at least some emphasis and some focus on training and learning” (Interview 72)

There are three types of development program: 1) Tailor-made for a certain group of people within the corporate office; 2) university or externally-provided courses; and 3) sector or industry-specific events (for example, training for lawyers and accountants to keep their license). However, attendance of development programs is usually self-initiated and managers and the HR team will not request staff members to attend certain programs and there are no “rules” on the number of courses required per year. The company has implemented courses for Contract Managers and Business Managers company-wide, yet the staff members can choose to attend these whenever it suits their schedule.

“It’s not a structured approach. The integrity selling was something that all of the BMs at [the company] did. Some of us did it a year ago; some of us are still doing it right now. The power-pitching and the networking events was something that was specifically arranged as we’re all asking for it. The contract course was run every year...it’s not like every six months you can do something” (Interview 62)

Line managers and their direct reports discuss learning opportunities together. At times managers will make recommendations, at other times staff members will find courses that

they want to attend and pass it through their manager (Interviews 54, 57, 58 and 65). Most informants' descriptions are similar to the comment below:

“You have to be proactive. Nothing will happen unless you go out and ask for it...(but when one asks) they're positive about it and if they think maybe not this one but maybe this other one they'll think about that as well...they're very keen to make sure that you're developing your potential and that you're always learning something and can bring something into the company” (Interview 66)

Development Course providers

Bringing in external facilitators: There is a number of development courses run by facilitators from external organisations or the university (Interviews 57 and 63). For example:

“...HR organised a CRM (customer relationship management) training through the employers and manufacturers' association” (Interview 60)

The process of formulating the tailor-made development course involves a training-need analysis and then selecting a suitable external training provider, with whom the organisation will develop a tailor-made program:

“We go through a really robust training needs analysis for the skills that the business really needs. So for example at the moment it's more up-skilling in that business development area...looking at a program that will cater those needs” (Interview 63)

The university: UCO staff gets 50% discount for the Business School short courses, which are usually two days and targeted more at a professional development goal such as leadership, project management, contract management, contract law. One informant describes them as “really relevant, practical courses” (Interview 63)

“I actually make sure that I get all the training from the university because what's the point of going outside when you can source it from our university?” (Interview 54)

Corporate HR division: The UCO's own HR function also runs wellness program in the organisation.

“...our HR also supports when it comes to activities like physical and mental things...every year we have also got company-wide well-being activities where you improve your health-awareness and health-consciousness” (Interview 54)

Conference attendance:

“...each of my CMs (contract managers) has attended conferences overseas around how to manage research better” (Interview 60)

Some informants note that attending these development events are important for networking, from both personal and job-related perspectives:

“Actually you get to meet a lot of people...when I was training...I was able to meet so many people from different departments...sometimes we deal with a lot of people from the university but you don’t actually meet them...you only get to meet them during events.” (Interview 54)

Development opportunities other than course attendance

In addition to the formal development courses, many informants (across different levels) have identified that development opportunities are not limited to attending courses:

“We’re trying to keep away from that kind of “tick the box, someone needs to learn time management, put them on a course”, because that doesn’t work...that’s something that we would ask: is there that opportunity to get exposure to a new project, or a stretch area, or step outside their comfort zone a bit in their job to develop their new skill...the reason is, if one person goes to these learning events, they hear all these great stuff, come away very enthusiastic and within three weeks about 85% or 90% of the information is lost, because it is not necessarily directly applicable in the job” (Interview 71)

Peer coaching or mentoring: Employees may receive coaching or mentoring from colleagues. Coaching and mentoring someone can be part of a staff member’s KPIs, often in terms of having an element of teamwork or helping the team to develop. This is also a part of the role and KPIs of all managers (Interview 71).

Knowledge-sharing: Development may also be in the form of knowledge-sharing with other colleagues.

“(My line manager) is doing some courses through her management courses, and she is sharing that information at the mentor with our team, and we’re working on things together anyway. That’s all development, and she’s taking on that mentoring role. There’s no cost associated with that, and I’m still learning. It’s a really good strategy” (Interview 75)

Talking to contacts or clients in the network: communicating and interacting with contacts in one’s network or sector can also provide development opportunities (Interview 62 and 73). For example:

“Our people learn about the sector, and we expect them to do it in an informal way because...they intersect with the university, they spend most of their time in the university talking to our academics...our academics first and for most they are teachers. It’s completely in their second nature; it’s completely in their intuitive they will wish to inform” (Interview 70)

Taking up other internal corporate projects: There are also opportunities to develop within the company as the company initiates internal projects from time to time. One informant described her experience being on secondment one day per week, managing a business improvement process internally. The informant explained how she wanted to have a chance to look after the whole management cycle of a project, and when the company launched a business improvement project (relevant to her work), she was invited to join the project team (Interview 69).

Challenges

There are two challenges to this UCO’s training and development. The main constraint on the organisation’s learning and development is again the budget:

“Any of our core initiatives are limited by budget and resources, so we have to priorities. We don’t get to do everything we’d like to do, but that’s just reality. We will get there” (Interview 71)

Also, a lack of time to attend development courses can be an issue:

“I find it very hard to take myself off...I have to really want to do it before I would really want to give up my work time because I just wouldn’t get done the things I need to get done if I took off too much time training” (Interview 68)

6.3.2. Motivation and effort domain

- **Performance appraisal**

The performance management process at the company involves a series of formal and individualised activities, primarily carried out by the staff member and his or her line manager. The HR division supervises the process, monitors performance reports, trains and supports line managers with performance management processes and sends reminders (Interviews 53 and 63). The three formal performance management events take place at the beginning of the year (at around March), mid-year (around July) and end of year (just before Christmas or in January, depending on workload and teams).

Beginning of the year: Staff members set key performance indicators (KPIs) with managers. There are also sections on career and goals, that is, what can the company do to help the staff member, including long (5 years) and short-term initiatives that are relevant to development programs (Interview 52).

“So you sit down with your boss at the beginning of the year and go through and set up your KPIs with your boss, and it’s not like they say “here are your KPIs, go and run with it”, you actually sit down and talk to them about it” (Interview 62).

Mid-year review: Around July, there will be a mid-year review that does not involve rating but is more about checking whether the staff member is working well and on track (Interview 52).

“We go through the KPIs and talk about where we’re on par, where we’re not doing well...what we need to work on and that sort of stuff. There’s no consequence of it, it’s just touch-base” (Interview 62)

Year-end: Around December and January there is another formal meeting between the staff member and the direct manager. A final rating is given to staff members based on their KPIs. Staff members normally self-assess or do some preparation first and then they will sit down with their direct manager to go through their KPIs and self-assessments. Staff members are rated on all of the KPI categories and given a rating. Overall the process is described as “very much transparent” (Interviews 52 and 62). For example:

“We’re encouraged to do our own ratings first, but I don’t do a formal process. What I do before hand is write up all my notes...and usually as a result of that I’ll have a rating in mind, and then my manager will do the same. He’ll read my comment and might actually add things in- (those that) I might have forgotten or he thinks are more important- because sometimes we value different achievements...usually it just happens in the discussion, sometimes I put forward a number, sometimes he does, and then we sort of discuss it, and tick a box” (Interview 69)

Key Performance Indicators setting

KPIs for more standard roles such as contract administrators or contract managers are set based on a template developed by their line managers and HR members. Based on these templates, the staff member and line manager modify and set the KPIs to suit each staff member according to the nature of their jobs, tasks and teams. A HR team member describes KPI template-setting as a consultative process:

“We have to set things around performance incentives and how that relates to revenue targets...(When setting guidelines for corporate office) we brought in an

external remuneration consultant over a year ago to look at the ways KPIs are structured and the way our performance incentives are structured so it's tied to KPIs, and she lead the (consultation) process with the senior management team (consultation) and also with the next level down. We never do anything in isolation” (Interview 71)

The consultative model also applies to KPI-setting for less standardised roles (such as BDMs) and KPI-setting at the team level:

“(Setting KPIs is) a consultative process...There are sort of some guidelines that are generic but within those there's a lot of flexibility for specific KPIs and goals that you set. It's a process that involves talking to colleagues that have some dealings with the area that you're working in and other stakeholders and thinking about the future and talking to your team and your manager...and making sure that your own KPIs tie into your team's overall strategy and that your team's strategy ties into the company's overall strategy as well” (Interview 72)

One informant also describes how her manager ensures that performance-rating linkages are clear:

“When we first set our KPIs- they haven't changed very much over the years- we had quite a detailed discussion over “if you do this, that's a three; if you do this, that's a four; if you do this, that's a five”, so we have quite a good understanding before you did or didn't do these things- what the numbers mean in terms of your actual work” (Interview 69)

Nature and types of KPIs

Depending on the role, a staff member's KPIs may have a mix of team components, company components and individual components. Everyone will have individual components. Contract managers have team components; Business development managers and General Managers have company components; Contract Administrators have no team component; line managers, depending on the team, may have a mix of company, team and individual components (Interviews 70 and 74).

In terms of the nature of KPIs, some are development-oriented, task-oriented, revenue-oriented and teamwork-oriented:

“I think half of our KPIs are based around revenue...and the rest of it is around team performance, relationships with the university and relationship within the team...10 per cent of my KPI is based around relationship within the team, so (when appraising my performance) my boss will go and talk to other people about the relationship I have with them” (Interview 62)

“BDMs have a set of clients and they have individual revenue targets...Some things that are measurable like the number of new PIs (principal investigators) coming on board but the main measure and the most reliable measure is revenue growth year on year” (Interview 60)

Challenges

There is a number of challenges with performance management. One informant notes difficulties around timing and coordination:

“It always feels like we’re running a bit behind...I don’t think (my KPIs were) set until April of this year...that’s already a third or a quarter through!...and our company strategy seems to run from mid-year...so I’m setting my KPIs when I don’t know what the company strategy is for the whole year, so you don’t feel that you know where you’re feeding in to the funnel” (Interview 58)

One member from a business-support team finds that she has to change her KPIs whenever there is a company decision to change:

“Last year was an interesting year- I had to change my objectives about three times because the business changed their track. That was interesting because I have never been anywhere that I would start doing work, then suddenly decided not to do that anymore” (Interview 66)

Moreover, although the company respects an individual staff member’s insight into their own work, one informant finds it challenging to define her deliverables in alignment with the manager’s and company’s goals on her own when setting KPIs:

“Having your KPIs set at what seems to be- for me anyway- a very insular level, sometimes it is kind of hard to see how it fits into say my manager’s and the company’s (goals)...surely you (the manager) have an idea of what my role should be delivering...(self-decision) is quite nice too, but what do you want me to achieve?” (Interview 58)

Informal performance discussion processes

Although there are only three formal performance management activities per year, some teams have chosen to have more regular individual meetings on KPIs and check-in discussions, or have relevant discussions as part of the individual meetings with the manager. This again reflects how different teams have different climates and routines:

“It’s not like HR says you have to meet monthly, but we choose to meet monthly- we just talk about how are things going, do I need help prioritising” (Interview 69)

“To me it’s more important that they bring that issue to me so we can figure out a solution for it. I always say to them “we’re not dealing with life or death here”...it’s like everything can be rectified” (Interview 67)

One line manager emphasises the importance placed on matching the performance management approach to different staff members’ personalities or situations:

“(It is a) tricky process...it takes a certain type of person who makes a good BM (business manager). By nature they tend to be quite positive...and they have to have an ego...to get the best things out of an individual, you need to learn about that individual, you need to learn about their style and manage them in a particular way” (Interview 55)

Also, it is interesting to note that in some of the close-knit teams, performance management is not only a formal task managed by the team manager, but may also involve peer-management:

“I don’t like the idea of siloing...in saying that, I don’t believe that anyone should be slack in the team. It’s interesting that it’s a natural dynamic if someone is slow, the others will actually say something about it, and they’ll come and talk to (the manager) about it” (Interview 67)

Dealing with poor performers

When there are poor performers, line managers will go through a process in which they first talk to the employee, find out what the real problem is, direct them to help and support or revise their job (which may involve moving them to other positions). In the worst case, the member will receive a warning and may finally result in a dismissal.

“You move them on. It’s usually just a wrong-fit, it’s nothing personal. It’s that their talents don’t match up with what the job required. We don’t have a set formula for that...we have move people out of their roles if they have been consistently not successful” (Interview 73)

Calibration exercise

Once the performance rating process is complete, line managers, senior management team and GM HR then carries out a calibration process to ensure equity across different managers’ ratings, especially for the staff members who have a larger incentive associated (Interviews 55, 63, 71 and 73). Managers and HR team members describe:

“The calibration exercise will pull out that fact that I’m a bit harder and others are a bit softer, and that’s something that HR does facilitate and I think that’s something that this company does particularly well...it’s trying to turn an art into a

science and I think we've done particularly well...even though it's a lot of work"
(Interview 55)

Staff members are also aware of the calibration exercise. For example:

"I think every individual is discussed at the SMT...so that means that if I'm graded and there's a visibility...so that kind of feels fair...I think you have to have a good relationship with your manager to do well, and they need to be able to sell you to the rest of the senior team and if there was to be any disagreement" (Interview 58)

The calibration exercise also informs HR planning:

"From there, there's a re-calibrated talent report that actually then becomes the responsibility of the line managers to bring in that. If they've got a high potential person, they have to work with finding opportunities. We have organisation changes happened, roles created...it's been a way to identify succession plans, it may be that some have seconded to a particular area. There are quite a few ways the information is then used, and it feeds into the whole development planning process too" (Interview 71)

- **Remuneration and incentives**

This company has an established, clear set of remuneration and incentives guidelines. The performance rating is directly linked to staff members' bonus and pay rise. Staff members, depending on their role, have an incentive scheme that ranges from around five percent (of salary) to 25 percent, which is related to both company performance and individual performance (Interview 73). The amount of bonus received for each employee does not have to go by normal distribution (Interview 53). Other than the staff member's performance, the company's performance will also affect the final bonus incentive received.

"There's a direct link, the performance-based component of my salary and performance review...it's fairly robust now in terms of your score directly relates to this percentage that you'll get from your available...I'd say it's transparent"
(Interview 72)

Staff members may also receive a pay rise based on their KPI ratings, yet the link between pay rise and performance appraisal outcome can be less obvious due to small differences:

"When you do remuneration, you've got a pot of money and the way the company's budget for remuneration increases might be X percent of the salary possible. So let's imagine the budget for 4% of the salary pool. The difference between being an OK performer and a great performer might only be half a percent...the difference is a difference but is small...the difference between how much people get in incentives is much more significant" (Interview 53)

- **Staff motivation**

According to a senior member, the company tries to motivate its staff by matching the person's goals and needs with the role itself, as well as aspiring staff members through placing emphasis on the high-potential, high-performance employees. One executive member explains:

"We're looking for the win-win. We're looking for understanding what are your motivations. Why did you join. What are you trying to do long-term in your career...Now, can we cleverly find a way to configure you work to enable those kinds of factors. If we can get that matched, we can get people engaged with the job. I don't think money is anywhere as important as that. Some people may have a different view, but that's our philosophy" (Interview 79)

Reflecting on the above description, most of the informants report that they are self-motivated. There are compliments paid about how the company is trying hard to develop employees and keep them interested. Others say that they enjoy their roles and working for the top UCO in the country. Informants describe motivating factors including:

Roles keep them interested (Interviews 66, 68 and 72)

"The academics that we sort of represent are wonderfully talented people, very passionate in their field and have a lot to offer, so it's motivating to be able to try and go out and do things on their behalf and get new opportunities to them to broaden their field and impact on their fields" (Interview 72)

Taking pride in company

"This is one of the biggest technology transfer companies in [this country], and this is why I am still here...it's like if I'm not going back to my [previous] role, what is the higher technology transfer organisation in [this country]? We have more IP managed here in the company compared to the rest of the [research institutes] in [this country]. We're the biggest" (Interview 54)

Development opportunities

"(The company) gives you challenges and they look at (your) progression through the company or personal development or your development in your role...they do actively provide information and encourage that...At the moment it is really just me wanting to learn everything...because I don't like not knowing everything" (Interview 56)

Positive environment

"I work for a great team and everyone has shared goals and wants to do well for each other" (Interview 72)

- **Career progression opportunities**

Description of and feedback on the organisation's career progression opportunities are mixed. Although there is a number of roles in the research centre that corporate staff members can move into, because the corporate office itself has a relatively flat structure, many informants feel that there are very limited upward career progression opportunities.

“Generally speaking, I don't think there's a lot of room for movement here. There isn't anywhere to go. If you come in as a CA maybe you can become a CM maybe you can become BDM, but beyond that, there is no other career opportunities...there's not a lot of vertical spaces. There's horizontal movement, but nothing vertical. So if you're a young, up-and-coming on a career path, you'd start here and you jump. You might stay here for a couple of years and just get some training and leave” (Interview 66)

Despite that, many informants suggest that as the company is growing, many new roles can be created or restructured along the way, so there are still chances to get promoted. There are also opportunities for members to move horizontally into other relevant divisions. In other cases, although there are not formal position shifts, staff members feel that they are still learning new skills through development opportunities (Interviews 52, 56, 57, 66, 68, 69, 72, 73, 74 and 75). One informant describes the organisation's promotion structure as a “career lattice” as opposed to a “career ladder”:

An HR team member explains:

“The career opportunities here are not necessarily traditional next job up the ladder opportunities...when I started at the business...there were 48 people in the corporate office; there's now almost 80. We have jobs now that didn't exist then. So the career opportunities through the growth are new opportunities...It's more the career lattice” (Interview 53)

Despite the possibilities for horizontal movement, one informant still finds it almost impossible to move into certain spaces due to the research centres' structure and culture:

“I rated very well on that (talent management) last year, and my manager told me that, but I haven't been very successful in the application to other roles. I've made a number of internal applications for roles at science and engineering and the research centres...There's been a lot of restructuring in that area, but they're usually looking for someone more senior, which means someone who does not have more experience than me, but older, which has been quite frustrating...it's like if you were a laboratory assistant, you have to wait for the lab manager to die or leave and that's the only way you'll ever be promoted” (Interview 69)

There are also other staff members who have no intention to move anymore and are content in their current positions (Interviews 54, 66 and 67). Overall, limits in the career opportunities have not resulted in high levels of staff turnover, much to the credit of strong development programs.

“It may have been a factor in people’s decisions, but there’s no one that I know of that has been the main reason for them leaving. The company has shown at least a willingness to explore creative ways of hanging onto its good people and working within to create new responsibilities and oversight of more strategic positions. There is a level of flexibility that exists to create roles to keep people” (Interview 72)

Internal progression process

For most roles, the organisation will look for suitable candidates internally first.

“We’re always looking at up-skilling our people through the training or leading career progression. So we would try and look internally first, and if we don’t think there is someone that would meet the criteria then we’d go external” (Interview 57)

Some informants who have gone through role shifts report that they did not have to go through a formal recruitment and selection process (Interviews 55, 58, 64 and 68), while others had to make applications and go through interviews. Internal applicants do not have to go through testing again, but there may be a reference check with their current manager (Interview 57).

Although there are merits to promotion and role shifts based on new roles being created, the lack of predictability makes it difficult to establish a structured and coherent promotional system. One informant identifies inconsistency in the promotion system as an issue:

“My own team is just restructuring, and they’re introducing [a new managerial position]...I can apply for [that position], but it’s quite frustrating because the (other) team had the [same position] introduced part-way through last year as a one-year trial. The person who has the job at the moment was just given it...We were sent an all-staff email going “this person’s now been appointed”...because my team hasn’t had [that position]...I do all that work. They’re now advertising [that] position in my team rather than giving it to me...so I’m quite frustrated and my manager has very openly said this is an HR decision” (Interview 69)

6.3.3. Opportunities to contribute domain

- **Job design and autonomy**

Manager- staff and team

Manager-staff communication in the organisation has been described as open and consultative. Teams usually sit together with their line manager in an open-plan office, making communication extremely easy. Some teams have scheduled individual meetings (Interview 55), whereas others only have regular team meetings. These meetings are chances for job-related check-ins and team catch-up (to ensure that everyone knows what other team members are working on). For example, from one employees' perspective:

“It’s pretty open and honest. We’re in the same office, so that helps I think. He understands what I’m doing on a day-to-day basis and vice versa. Lots of informal conversation...have a coffee, have some lunch and talk about all sorts of things that may or may not be related to what I’m up to, but it feels like quite an even relationship. It doesn’t feel like someone over the top of me trying to tell me what to do or to micro-manage. It’s much more like the relationship with a colleague instead of manager” (Interview 72)

Line managers also comment:

“(Communication is) not casual, I’d call them organic...organic is flexible, but there is structure to it, there is some purpose...certainly not a sit down in a room and going through a checklist of thing” (Interview 55)

“I’m a much better manager sitting in my team than being in the office next door, which is where I historically (used to be). I don’t believe that’s an effective way, because you are the line manager to those people” (Interview 67)

Company-wide

Despite good within-team communication, inter-team communication across the corporate office has been identified as an area that needs improvement.

“(We are) at the stage where we need to start looking at more formal communication, because it (the company) has just gone from being quite a small company to one with a few hundred employees (including the research centres)...all of a sudden you can’t have a personal relationship” (Interview 52)

“Yes that is a challenge for some teams with communication and collaboration...HR and finance work across different teams and floors, (but for example) education team doesn’t cross over science team” (Interview 53)

The company holds whole-of-company meetings quarterly in the boardroom (Interview 56). There are also CEO updates every 2 months, in particular after board meetings (Interview

61). There are also a few cross-team meetings according to roles. For example, every fortnight there will be a meeting for every business manager from science and engineering and every three weeks or month there will be a meeting for all the business managers across the organisation.

“We all need to be aware of what each other is doing, in the end [this country] is quite small. So I’m working in for example a company in agriculture, they might have some healthcare needs or biological needs, so I need to talk to the guys in different areas anyway. So I need to be aware what they are doing, and they need to know what I’m doing” (Interview 62)

There have also been company team-building activities such as “Office Olympics” that tried to encourage inter-division interaction. There is “generally a good turn-out” to these activities and one informant expresses that such activities “definitely opens up the office and get more flow of conversation between different departments” (Interview 56). Teams have also been making an effort to encourage inter-team interaction. One informant comments:

“Our team decided doing monthly lunches. So we bring the lunch and we invite people to come. There are people like in technology development who, I know who they are and I know their names...but I don’t know what they do and I don’t know how their job relates to what we do...last week we had HR come in just to give the overview for HR so we know what’s their thing, what’s happening and we’ve updated them with what our upcoming prospects are...I don’t know how they felt about it. For us it was good. We’ve got the next one...That’s our team’s initiative, to work with the cross-team stuff” (Interview 75)

Some other informants point out the difficulties with fostering, managing and maintaining organised, open and clear communication channels within the company. These difficulties are primarily due to:

Diverse audience

“We try to target our audience (in our bulletin and emails), because we have a very complex audience. We have the corporate staff, we have centres, we have university staff who aren’t necessarily [this UCO’s] staff, we’ve got [this UCO’s] staff who are also university staff...we have to be really careful who we are targeting” (Interview 66)

Communication through “pipelines”

“I think because we’re on three floors, I think a lot of the communication is done through teams. I think that it’s the lunchroom, it’s the water-cooler, it’s having a smoke outside. The communication is done through the pipeline. We try to keep

official communications going through, so that people aren't sending out emails- they have to be approved before they go out, or else it'll cause a lot of confusion. We do try and tailor and make sure that messages are going out in a controlled fashion" (Interview 66)

Lack of a formalised and collective company culture

"...in the earlier years, I don't think there was really much of a team culture or a brand. I think to some degree that has developed quite well in trying to ensure that...to have a more of a unified understanding across the company as to what [the company] is all about...that has advanced quite a lot. I think there is still some room to do even better...but it is getting there" (Interview 72)

Autonomy

Perhaps due to the highly specialised work setting, most informants suggest that although they may have limited freedom to design their job (due to set portfolio and financial constraints), they feel well-respected and highly autonomous in their role. For example:

"I can do what I think is necessary to ensure that the contract gets delivered...I have a lot of autonomy I guess. There are some particular guidelines around check points" (Interview 75)

"We take on projects we can get basically. For example I spent a lot of time this year and last year trying to get work in [one particular] industry, and a couple of months ago I met with my boss and told her that it was a waste of my time and I think we should be re-focusing on other areas, and we have. So if things are not working out in certain areas, you do have the opportunity to talk to your boss about where best you could be working" (Interview 62)

Work-condition flexibility

Due to the nature of work, many staff members need to do international traveling, conferencing or visit clients and project teams out of office, and thus work-condition flexibility is again high (Interviews 52, 54, 56, 62, 65, 66 and 72). Besides that, informants suggest that the company is also relatively flexible around individual schedules and preferred hours of work and highlight the significance of trust. For example:

"There's a degree of flexibility. No one is watching a clock and making sure that you come in at a certain time and leave at a certain time. It's particularly my role when I'm on late night teleconferences, flying to different places over the weekend...Because the team is professional but wants to do a good job for each other, there aren't any people that are pulling their way not doing enough or a bit lazy. There's that kind of culture, so that means there's a lot of trust in people managing their own time" (Interview 72)

- **Staff involvement**

The board (which makes the final decision on revenue targets) and the SMT (operational planning) carry out most of this company's strategic decision-making. Individual staff members are not involved in strategic discussions. However all employees are involved in discussions on how their own performance is to be measured (through KPI-setting).

"I think (ensuring the consistency of KPIs across different levels) is the manager's responsibility at the end of the day, but we're all brought in to the process and ...we're certainly communicated about what the company's overall goals are. We collectively come up with a team strategy to make sure it aligns with the company's strategy, and then individually we all make sure that we're aligned with our team strategy. So yea it's pretty consultative" (Interview 72)

In addition, there is also some flexibility for employees to raise alternative roles or experiences that they are interested in and the strategic level may support such role modification (e.g. secondment to another project for one day per week, see section 6.3.1 'Development').

6.4. Employee perceptions as HR outcome

6.4.1. Employee appraisal

As section 6.3 shows overall, the informants' appraisal of this organisation's HR practices is highly positive. Most people acknowledge and compliment the company's efforts to develop its staff members and ensure that they are motivated. However, many believe that the positive corporate climate is created via a bottom-up process rather than being fostered by HR or the strategic level. Two informants mention that the company values its human resources and take the staff members' feedback very seriously:

"The company believes that the power of the company is based on its human resources, its people...when we had our 360 degrees survey, I know that they value the people more than anything...I find it very positive in the sense that you can comment (on) anything- how do you feel your value. It's not personal, it's really more professional" (Interview 54)

"They do take your feedback seriously and they base changes on that feedback" (Interview 56)

HR System effectiveness

Staff members of this UCO believe that the company's HR system is effective according to three main indicators: staff behaviour change, retention rate and staff member feedback.

“It’s quite hard to measure the success like a sales training program on revenue generation, but we know it is successful because we have run into a number of times where people are following the method (learned from the development program)...by running these programs...people from different groups come together and we know we are getting collaboration...and we’re trying to move a lot of our systems online, and there was good feedback...At corporate, (the turnover rate is) not that high so about 9% for last year, which is way below market average” (Interview 53)

“I think we are making a really positive impact with the HR team. Definitely with the relationship...I think in an HR role you can kind of tell if it is successful or not because...before making decisions they (other staff members) come and bounce ideas off you...where it’s very much they’ll say “this is what I’m thinking with my team, what do you think?” So there’s that true partnership” (Interview 57)

“I guess because our attrition hasn’t been that high, we can assume that the culture or climate has been very good and I hear that from exit interviews feedback from people that (they have) really enjoyed the people number one” (Interview 63)

“...before I joined, a lot of it (HR) was quite transactional. We’ve now come quite a long way in terms of proactive initiatives and having good, robust systems and processes right across the board. We’re very embedded in the business. The business partners’ model really worked here, and that’s been a shift” (Interview 71)

However, it is difficult to link task performance and revenue to HR system success.

“But we can’t say someone did integrity selling and she got this two million dollar deal and that’s why- that’s hard...We follow up on behaviour, but making that link between HR and say revenue is really difficult, and I think everybody will tell you that” (Interview 53)

According to one HR team member, the organisation’s corporate staff members are generally performing quite well.

“We don’t have many performance issues or ER (employment relations) issues that come up in this office (corporate)...when they do their managers manage very tightly, because it’s a very close-knit environment” (Interview 63)

6.5. Chapter summary

This UCO’s HR strategy supports corporate strategy by helping the company achieve its financial growth objectives through both capacity building and talent management. There is a strong alignment between this UCO’s organisational strategy and HR strategy. Due to the tight budget, the whole SMT debates and discusses investments made on HR. Over the past five years, this organisation’s HR division has developed stably into what is now a rather mature function, which clear processes and policies that are serving the

organisation's needs. The fact that the business partner model is successful also illustrates that line managers are experienced and capable, as HR team members can take on a consultant role rather than a management role. Line managers have freedom in how they want to manage their team; therefore although there are some broad behaviours that are valued at the corporate level, every team has a different climate that may be reinforced by the line manager or developed naturally.

This UCO effectively leverages its resources and opportunities to develop staff members and keep them motivated. With clear and standard policies and practices in place and line managers being responsible for both climate-creation and staff management for their own teams, the level of mismatch between managerial intention and HR implementation is relatively low. Employees' description of HR experience is also highly aligned with those explained by line managers. In this sense, the HR architecture in place supports each team or division's climate creation relatively well.

The next chapter presents cross-case analysis for the three cases.

Summary table for UCO Three

Strategic goals	<ul style="list-style-type: none"> To achieve revenue growth
Organisational control structure	<ul style="list-style-type: none"> Revenue targets set by board of directors. A strong SMT together makes all other strategic decisions Divisional structure with three revenue-generating divisions: technology development, research and consulting, education. A few cross-sectional teams (e.g. all BDMs have meetings together)
Measurement of performance	<ul style="list-style-type: none"> Whether the set revenue growth target is met Common commercialisation measures: numbers of patents, IP protection, spin-outs, licenses, volume of contract research and number of university staff engaged with commercial process
Strategic HRM presence	<ul style="list-style-type: none"> 6 HR members looking after over 700, including staff members at research centres (85 in UCO) Line managers hold HR responsibility. HR as business partner (consultant role)
HRM system coherence	<ul style="list-style-type: none"> HR policies and practices established and functioning well. Stringent selection process (but not clearly linked to other HR practices). Development, performance appraisal and rewards relatively well integrated.
Intended HR outcome	<ul style="list-style-type: none"> Supporting each team with building their intended culture Promoting a positive workplace climate (although HR does not explicitly “create” it and encourages more bottom-up process)
Strategic-implementation alignment	<ul style="list-style-type: none"> Well-aligned as line managers plays the key role in actual staff management with HR support. Cross-division communication needs improvement
Key organisational challenges	<ul style="list-style-type: none"> Challenging to meet growth target due to lack of market absorptive capacity (lack of large businesses in the country)
Key HR challenges	<ul style="list-style-type: none"> Budget is a constraint (on development especially)

Table 6.1: Summary table for UCO Three

CHAPTER SEVEN: CROSS-CASE ANALYSIS

Reflecting on the data and information presented in Chapters Four to Six, this chapter makes cross-case analyses and comparisons and identifies common themes across the three cases. It first evaluates HRM in UCOs from the resource-based view (RBV) of the firm. It then compares a number of aspects that relate to the formation and execution of each UCO's organisational strategy. The next section examines how different organisational strategies determine different HR strategic objectives and in turn result in differences in HR program configuration. The fourth section evaluates the linkages between HR practices and employee appraisals of HRM. The fifth section presents the modified theoretical model that summarises variables covered in sections 7.2, 7.3 and 7.4 and responds to the main research purpose and research questions. Finally, this chapter concludes with a brief summary.

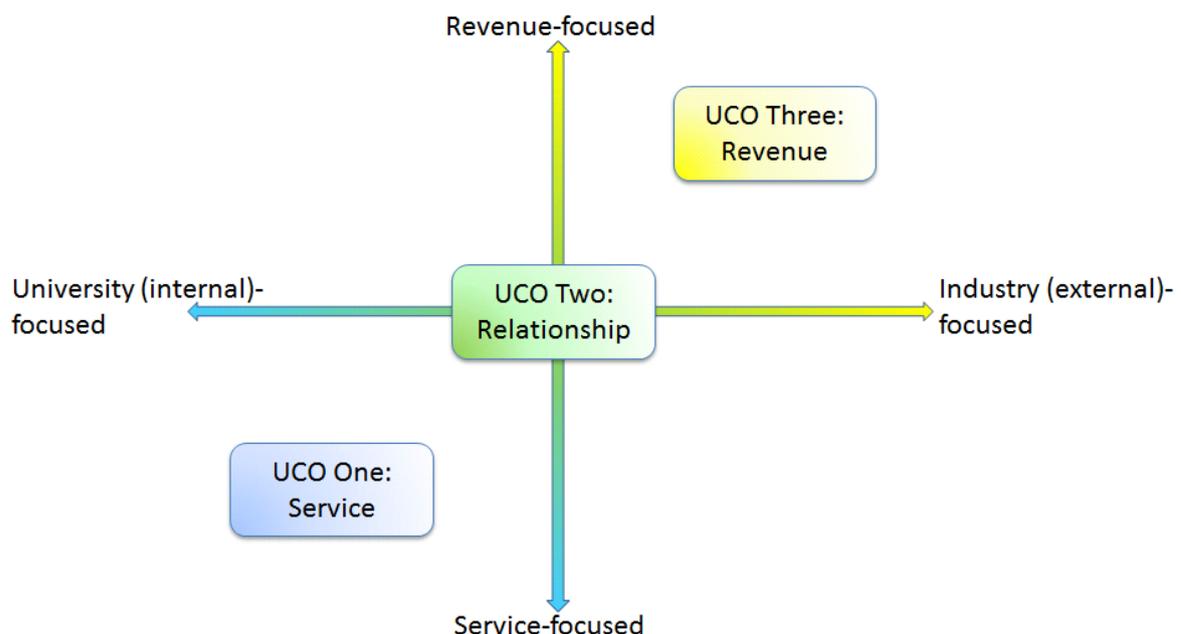
7.1. HRM in UCOs: The Resource-Based View

According to the RBV, organisations must meet four conditions if they want to achieve sustained competitive advantage: heterogeneous demand of HR; rarity of HR configuration; inimitable HR configuration; and a lack of substitutable HR practices (Barney, 1991; Wright & McMahan, 1992). The findings of this research reflect this view, as each of the three cases has a unique configuration of human resources capacity. However, the extent to which each UCO's HRM constitutes an element of the organisation's sustained competitive advantage varies. This is primarily due to differences in the relative maturity, clarity and internal coherence of each UCO's HR architecture. Although each of the three UCOs has a heterogeneous demand for HR, there are discrepancies among the three in the levels of rarity, inimitability and substitutability of their respective HRM. Overall, UCO Three, which has the highest levels of rarity, inimitability and least substitutability of HRM at this stage, is also the firm that is experiencing the least HR problems, displaying the most positive employee appraisal, and being acknowledged as a "stable" UCO. UCO Three's HRM is rare and inimitable in the sense that, with its unique organisational structure that governs numerous research institutes, it is able to provide relatively more career progression and development opportunities. It is also less substitutable as the coherence of HR system and relevance among different HR practices form synergistic relationships (Jiang et al., 2012), making it less likely for HR practices to be replaced.

One important note to make regarding UCOs' HRM from the RBV perspective is that while UCOs compete with each other for industry investment, business clients and commercialisation managers, there is no direct competition between these UCOs for the academic services (in the forms of contract research, innovation, customised programs) that each UCO offers. The competition for these "suppliers" is at the university level where universities try to attract and retain quality academics, and UCOs can only try to extract the best or the most suitable out of what is available from the researchers. The only exception is when a lack of clear university regulations causes competition between UCO and other university institutions such as the research office, as in the case of UCO One. Therefore when one considers the heterogeneity of each UCO's HR, it is necessary to also consider the universities' researchers as these are the key players who provide UCOs with the "input" of intellectual endeavour. In this sense, UCOs begin with higher levels of HR heterogeneity than other professional service firms by default, based on the pool of university academics, different research strengths and research areas of the university.

7.2. Organisational Strategy

Figure 7.1: The three models of university commercialisation organisations



Corresponding to existing literature, this research identifies a number of contextual factors that affect UCO HR decisions. These include the UCO's history and life cycle stage (Aycan, 2005; Paauwe & Boselie, 2003); UCO strategy as reflected in organisational performance measurement, structure and management philosophy (Beer et al., 1984; Bowen & Ostroff, 2004); environmental contexts, including university, national and international environment (Boxall & Purcell, 2011; Gooderham et al., 1999; Hofstede, 1983; Jackson & Schuler, 1995). The following sections discuss these factors.

Organisational history and strategic development

All three UCOs share the same goal, which is to enhance the university's commercial viability. However they address this mission through three distinctly different strategies. UCO One mainly focuses on providing service that resembles commercial consulting to the university and helps the university cut costs. UCO Two has recently shifted from an income-focused strategy to a relationship-focused model that aims to further increase public awareness of the research output generated by the university. UCO Three follows the more "traditional" model (from a North American perspective) by dedicating itself to generating income and has been relatively successful on this measure so far.

The paths taken by these three UCOs in terms of organisational and strategic development are dissimilar. Despite strong strategic intention (mainly from the CEO) to enhance organisational effectiveness, UCO One finds itself tangled in issues that are entrenched in the organisation's history and the university's structure. As the university failed to clearly define and decide the role of the UCO when it established this organisation, this UCO's mission and strategic goals have experienced a number of shifts in the past two decades. Organisational restructuring and name-change often accompanied these shifts, yet most of these shifts were top-down, spontaneous board decisions rather than results of careful long-term planning. These continuous changes made it challenging for the organisation to develop and grow with clear goals.

Similar to UCO One, UCO Two has also experienced numerous organisational restructurings, but there is a major distinction in that the changes for UCO Two are driven by the UCO's own strategic activity rather than board interactions. The board brings in a CEO who they believe is able to deliver what the UCO requires at that particular stage of organisational development, and lets the CEO drive the organisational changes. With the organisational effectiveness and reputation (on campus) reaching a historical low around

eight years ago, this UCO has gradually re-established itself by enhancing operational clarity and efficiency between 2005 and 2011, and then began refocusing its strategy in 2011. Although it has primarily focused on generating income and commercialising research since its early beginnings, when it became clear that the revenue-generation model is no longer viable and the company is unable to succeed on this measure, it has undergone a significant paradigm shift that not only changed its strategy and strategic goals, but also the whole operational structure that supports the strategy. In contrast to most changes made in UCO One, which often lacked a clear purpose and did not have operational realignments that corresponded to these changes, both recent restructurings for UCO Two have been clear, thorough and precise. This UCO's relatively small size, with only around 30 staff members (at most) throughout the past decade, is perhaps one of the facilitating factors that allowed it to implement changes more efficiently and effectively than UCO One.

In contrast, UCO Three never experienced organisational restructuring on the same scale as the first two. It is established with a clear purpose right from the outset, and that is to generate income for the university from the university's research output. While there have been internal changes (for example, creation of a new line or division), these remain relatively minor and the organisational strategy remains the same. This has allowed the organisation to grow and mature steadily without significant disruption or confusion. Multiple factors contribute to the relative success of UCO Three on financial and quantitative measures, and these will be discussed shortly.

Performance measurement

As the three cases operate on different strategic models, each organisation measures its success and performance on different scales and by different means. UCO One, which provides commercial service for the university, considers itself to be successful as long as it meets the goals and delivers required services set by the board (the university) every year. At times this means that the company is considered to have performed well even if its account shows a financial loss. This is because the loss, which is budgeted, is usually a result of the UCO using its corporate structure to provide commercial service for the university. This indicates that the university values the services provided by the UCO more than the financial returns generated by the UCO.

After its 2011 restructuring, UCO Two now promotes Open Access IP, which discloses IP to businesses that are interested in these projects at virtually no cost and bases its performance evaluation on academic perception and public awareness. These can be measured by indicators including the number of new academics contacted, qualitative feedback from academics and community, number of Open Access IP contract established, and frequency of media exposure. It also aims to generate financial return from the university's IP, yet it views itself as an innovation hub rather than profit-generating unit and it does not list revenue growth as its immediate priority.

UCO Three positions itself as a revenue-generating arm for the university and thus reviews its performance according to more traditional measures including overall revenue, numbers of patents, spin-outs, licenses, and volume of contract research. There are also revenue growth targets set by the board that this UCO needs to meet in a given timeframe.

Organisational structure

Each UCO's organisational structure and divisions correspond to its strategy. Although all three organisations have an organisational function that is dedicated to technology disclosure, each company's level of emphasis on this activity is different. For example, for UCO One, the number of technology commercialisation staff (including research and consulting) accounts for 30% (24% at time of field visit due to vacancies to be filled) of total staff number. The same figure is 39% for UCO Two (which does not offer research and consulting services) and 44% for UCO Three. The largest division for UCO One is teaching and learning, which provides customised education program delivery for academics and students of its own university, accounting for 40% of all staff. UCO Three also has a substantial teaching and learning division that accounts for 15% of all staff, but this division delivers and coordinates customised education program for other domestic and international institutions. On the other hand, although only accounting for 10% of the company, UCO Two has an open innovation and marketing team, which does not exist in the other two organisations. UCO Two also has a position that is first of its kind in the country that targets technology commercialisation from students. These proportions are clear indications of each UCO's key focus, with UCO One focusing on service delivery for the university's own academics, UCO Two combining technology commercialisation with marketing (enhancing both academic and public awareness) to facilitate relationship development, and UCO Three placing roughly equal focus on each of the three revenue-generating channels.

In comparison to the first two cases, the structure of UCO Three is much more business-oriented in the sense that there are business development (BD) positions focusing on different industry sectors (e.g. dairy sector) rather than university faculties. In other words, one BD manager (BDM) of UCO Three may work with several academics across different faculties to deliver a project commissioned by a business. Staff members also refer to the UCO as the “corporate office”. Half of this UCO’s board are members from industry, while UCO One only has one external commercial advisor and UCO Two only has two members from industry. This commercial focus is also evident in hiring criteria, which are discussed later. UCO One is the most internal (university) focused of the three. Perhaps because most of the technology commercialisation positions were vacant at the time of the research, informants of UCO One barely mentioned business clients and conversations around work content usually surround meeting academic expectations and providing service for the university. UCO One is also the only organisation that places its staff members in university faculties (in the Dean’s office) to assist the faculties with the identification of possible research commercialisation opportunities. UCO Two has a more balanced orientation, attending to both academic needs and business interests; nevertheless, informants from UCO Two also emphasise the need to gain academic trust.

As discussed in Chapter Six, another structural characteristic that makes UCO Three different is that in addition to working with university academics, it also governs various research institutes across the country. While this structure does not have a significant impact on UCO Three’s HR operations, it makes it much easier for UCO Three to control and anticipate what output and when the output can be delivered (at least from these institutes), which are again important factors that contribute to financial returns and organisational reputation among business clients.

Governance and management

All three cases have an executive team (or senior management team) led by the CEO. The executive teams for UCOs One and Two were created very recently and have not yet exerted much influence on the organisation’s strategy. However there are significant differences between the power structure in the two organisations’ management. The CEO for UCO Two is new to the company, having only joined towards the end of 2011, making the accumulative power (or experience and knowledge of the organisation) difference much lower between the CEO and other executive team members. With a *laissez-faire* management style, this CEO usually lets the managers and executive team members make

operational decisions. It is nevertheless important to note that it is the CEO who led the recent restructuring process, rather than the executive team (which is created as part of the restructuring). The CEO is the person who is most knowledgeable regarding all the main concepts, ideologies and bigger picture behind the new strategy, while the executive team members are more aware of the organisation's histories and struggles. Most executive members also talk about their direct communication with board members.

UCO One presents a different picture. The CEO of UCO One has been in the company (or one of the current company's predecessors) for more than a decade, and has always been in an executive position. This makes this CEO much more knowledgeable about the organisation's histories and challenges than other executive members, who may have only joined the company recently or have only been promoted to the strategic level recently. The CEO is also the main person from the UCO who communicates with board members.

UCO Three is again different from the previous two. It is led by a strong and stable executive team. Over half of the executive team members have been in this company for more than seven years and all of them have been in the strategic level for at least four years. Every executive team informant is able to talk about the organisation's history, development stages, events and challenges from the past, strategic orientation, board discussions and even international comparability in a few cases. The executive team knows the company and its strategies as well as the CEO (or even better than the CEO in the case of a few informants). This again reflects the relative maturity and stability of UCO Three.

Although the governance structures of the three UCOs do not have a direct effect on their HRM, they are important determinants of the organisational context (such as stability and extent to which decision-making is centralised) and organisational strategy. The organisational context and strategy, in turn, inform HR strategy and HR practices. Therefore it is important to consider these three UCOs' governance and management structure as part of these organisations' HRM context.

UCO	Strategy	Characteristics	Details
ONE	Provide Service	History and development	Role of UCO not clearly defined initially, experienced numerous changes. 2011 merger combined teaching and learning services arm with technology commercialisation arm to form current comprehensive entity
		Organisational structure	Divisional structure: Technology transfer; contracts, asset and consulting; teaching and learning commercialisation for internal staff (plus three company support divisions)
		Governance	CEO= main decision-maker and communicator with the board Strategic level consisting CEO and six GMs Only one (17%) board member from industry
		Orientation	Internal (university) and service-oriented
		Performance measurement	Whether the objectives set by the board (university) are met
TWO	Build Relationship	History and development	Oldest UCO of the three. Company model failing by 2005, which led to a major restructure that retrenched most staff. 2005-2011 focusing on establishing processes. Prior to 2011 focus on generating profit. 2011 paradigm shift to focus on building relationships between academia and industry
		Organisational structure	Matrix structure: Focusing on technology commercialisation and marketing (no contract research or teaching commercialisation)
		Governance	Flat decision-making structure. CEO initiated new strategy but whole company involved in implementing operational changes Two (29%) board members from industry
		Orientation	Acting as the bridge between university and industry. Focusing on both service (short ~ mid-term) and revenue (long-term)
		Performance measurement	Academic perception and public awareness
THREE	Generating Income	History and development	Role of UCO clearly stated right from the outset. Company growing stably over the past 25 years
		Organisational structure	Mostly divisional: Technology transfer; research and consulting; contract education for external clients (plus three company support divisions). BDMs also form a cross-functional team
		Governance	Experienced divisional general managers, forming a strong executive team Five (50%) board members from industry
		Orientation	External (industry) and revenue-focused
		Performance measurement	Revenue growth; numbers of patents, spin-outs, licenses, and volume of contract research

Table 7.1: UCO strategies and characteristics

External contexts: university, national and international environment

The university is the stakeholder that has the most influence on the organisation in all three cases. The university defines the role of the UCO and guides the organisation's strategy. There are slight differences in how the university (the board) governs each of the three UCOs, with the first university having the most centralised control over the UCO (in deciding what services it should provide), the second university playing a supervisory role that provides feedback and suggestions to the UCO when needed, and the third university setting revenue targets for the UCO but leaving the implementation of goals and strategies to the UCO's own strategic team.

Clarity of university structure and responsibility allocation among university units are also key determinants of UCO effectiveness. One of the main challenges that UCO One faces is the lack of clear university policies that guide how and when academics should cooperate with the UCO, which in turn leads to internal competition between the UCO and the university research office. This significantly hinders the UCO's ability to generate more financial return from technology commercialisation, which is recently identified as one of the UCO's current objectives. In contrast, UCO Three has a strong presence on campus and received strong support from university policies and regulations.

UCO Three, which is based in a different country from UCOs One and Two, places much stronger focus on revenue generation than the first two cases. Informants from UCO Three recognise access to funding as one of the main motivators for academics to engage in commercialisation activities. On the contrary, UCOs One and Two need to work much harder to gain academic trust and attract academic interest, and one informant from UCO Two explains that their academics are more interested in sharing their research output than making money from it. This reflects differences in national R&D funding availability between the two countries. Although both countries are lagging behind OECD average in terms of percentage of GDP expenditure on R&D, which is 2.38% in 2010, New Zealand's investment level of 1.30% (2009 data) is still much lower than Australia's investment level of 2.20% (2010 data) (OECD, 2011).

The significance of international market is stronger for UCO Two than UCO One and is the strongest for UCO Three. Informants of UCO Two mention receiving potential industry partners from overseas (Interview 46), whereas over a third of UCO Three's clients are overseas. This is likely to be a consequence of the country's limited domestic

market capacity. Table 7.2 summarises the respective environmental contexts for the three cases:

UCO	Strategy	Environmental context	Details
ONE	Provide Service	University (board)	Centralised, top-down control. University sets performance objectives
		University (policy)	Lack of clear university policy around responsibility allocation with research commercialisation, causing internal competition
		National R&D investment	2.20% GDP investment in R&D
		International market	No evidence of international business relationships
TWO	Build Relationship	University (board)	Board selects CEO based on ideology, and then provides support and advice. UCO sets own performance targets
		University (policy)	UCO “earning” academic trust and support. University policy did not provide particular support or hinder performance
		National R&D investment	2.20% GDP investment in R&D
		International market	Some international projects.
THREE	Generating Income	University (board)	Board makes the final decision on performance (revenue) targets
		University (policy)	Clear policies around commercialisation and academics encouraged to commercialise
		National R&D investment	1.30% investment in R&D
		International market	Significant international market with 40% clients overseas

Table 7.2: UCO environmental contexts

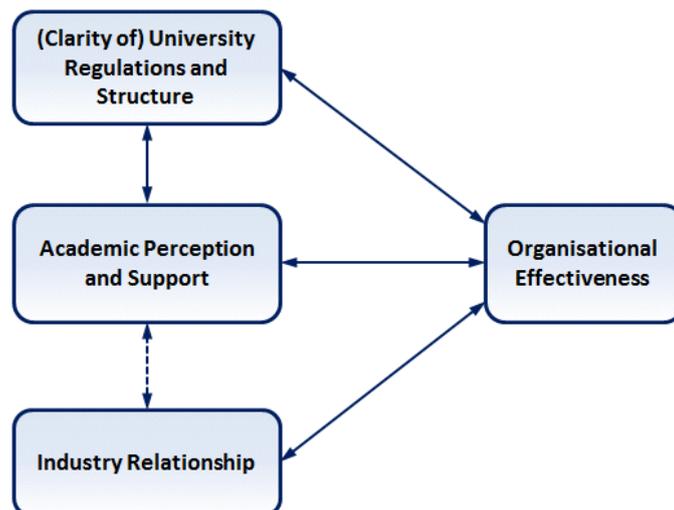
Key determinants of UCO strategy

Figure 7.2: Main determinants of UCO strategy



Regardless of the selected UCO strategy, one indirect determinant and two direct determinants of UCO strategic model emerge across the three cases. The two direct determinants are university needs (whether university and academic staff members seek service or more funding) and organisational leadership (the CEO and/or executive team ideology). Both university needs and organisational leadership are affected by the national context (R&D investment levels and absorptive capacity of the domestic market). In addition, university needs often dictate UCO leadership ideology, as the board (representing the university) selects the CEO whose ideology and experience fits with the university's commercialisation needs. Figure 7.2 above illustrates these variables.

Figure 7.3: Main determinants of UCO effectiveness



Three main determinants significantly influence UCO effectiveness, regardless of their strategies. These include the clarity of university regulations and structure (regarding commercialisation and disclosure of academic research output and roles of each unit), academic perception and support of the UCO and interest in university or research

commercialisation in general, and the UCOs' networks and relationship (or level of public awareness) in the industry. There are also feedback relationships between organisational effectiveness and all three determinants. As organisational effectiveness increases, its reputation will enhance and hence levels of academic perception and support as well as public awareness of the UCO will also increase. It is also possible for an effective UCO to shape and improve university regulations. There is also an indirect relationship between academic support and industry relationship, as positive academic perception fosters stronger academic-industry ties. Figure 7.3 presents these relationships.

7.3. HR Strategy and HR programs

All three UCOs suggest that their HR strategy is “to support the organisation’s strategy”, and the organisation’s strategy is shaped by multiple factors and contexts, as discussed in sections 7.1 and 7.2. Corresponding to the respective organisational strategies, the HR strategy for each UCO aims to meet the organisation’s current developmental needs. Section 7.3 outlines the main HR objective for each UCO, compares the three HR systems, discusses the extent to which each organisation’s HRM is aligned and serves to achieve intended climate, associates the respective HR programs and practices with the HR architecture ideal types, and finally it discusses common HR challenges.

HR strategic focus and presence

All three UCOs share the common HR intention to create a collegial and positive workplace, yet the three UCOs have designed and adopted different HR practices to achieve this outcome. UCO One attempts to increase the number of whole-company development events and explicitly reinforces corporate values and behaviours. UCO Two implements a high-involvement model that incorporates all staff members in the decision-making process. UCO Three focuses on developing employee skills and capacity. This finding illustrates the idea of equifinality (Delery & Doty, 1996; Kehoe & Collins, 2008), as the three UCOs attempts to create the same organisational climate through different HR practices that fit each UCO’s particular context.

Beyond the broad, generic HR goal of creating a positive work environment, each UCO has a unique HR strategic aim that corresponds to its organisational strategy (or organisational issues). In order to enhance communication and integration across the whole company, as well as establishing standards and policies that the predecessors lacked, the

current HR strategic focus for UCO One is to foster conformity. This is an important step not only because it is thought necessary to ensure equity and fairness across the organisation, but also because establishing common standards and creating “one culture” is more important for an organisation that seeks to provide consistent, quality service (as in the case for UCO One) than one that pursues innovation or novelty in commercialisation approaches.

UCO Two, in the contrary, places much less emphasis on creating a single culture and instead, its HR strategy endeavours to develop flexibility. Staff members of UCO Two are encouraged to come up with new ways of completing their jobs or new ways of defining their roles. This organisation also adopts a high-involvement model, which is often complementary with a flexible workplace (Guest, 1997). While UCO Two renamed its HR division to OD (organisational development) function, there are few distinctive differences between UCO Two’s OD activities and the other two UCOs’ HR activities. The only notable distinction that distinguishes UCO Two’s OD function from the other two cases’ HR functions is its relatively insignificant strategic presence within the company (which is discussed later in section 8.1).

Being the most stable and mature out of the three cases, UCO Three’s HR strategy aims to strongly align its HRM with organisational strategic goals and strengthen its HR skills and capacity by establishing a partnership model that provides staff members with support, advice and development opportunities.

Corresponding to the above HR foci, the extent to which HRM is HR-driven or manager-driven is also different for each UCO. As UCO One is in the process of standardising HR policies and routines across the whole organisation, HRM still remains largely in the hands of the HR function. The HR function drives activities such as recruitment and development and coordinates the company’s culture-building activities centrally. At the other end of the spectrum, UCO Two’s HRM is mainly manager-driven, with each line manager proposing recruitment needs, managing their direct reports’ performance discussions and assessing development requirements. The HR manager, referred to as organisational development (OD) manager after the 2011 restructuring, is involved in most HR activities by helping in coordination, but does not play a dominant role in day-to-day HRM. There is also no evidence of the OD manager being the main driving force behind any significant HR initiatives or organisational changes. UCO Three shows a more balanced share of HR control between the HR function and direct managers. Direct managers are in charge of

managing their direct reports and deciding what sort of behaviours and climate they want to create in their teams, but do not bypass the HR function in doing so. HR team members have established a positive reputation and are respected “business partners” in the organisation. Line managers seek advice from the HR team and define tasks or address issues with HR support. The HR division is also in charge of managing cross-functional HR activities. For example, it collects feedback and suggestions of development needs from line managers, goes through deliberation processes and takes the proposed activities forward to executive team meetings for approval. This is different from UCO Two, where line managers do not often go through the OD manager before sending their direct reports to development programs. It is possible to attribute this contrast to differences in organisational size, for example, in the case of UCO Two, with only 30 people and a flat organisational structure, there is less of a need to engage in cross-functional management or coordination.

The levels of board engagement (or interest) in the UCOs’ HR are also different, with UCO One’s board having no interest in the organisation’s HR and UCO Three’s board showing the highest level of attention on HR out of the three cases. The board of UCO One does not request any HR reports and is only interested in whether HR issues are resolved. The board for UCO Two shows moderate interest in the company’s HR and what the company’s strategic level is trying to achieve through HR, but feels that it is up to the company’s own management to deal with HR issues and decide how they want to operate or manage. Regardless, the board does receive HR briefings during board meetings on matters including turnover, recruiting and organisational health and safety. In comparison to UCO One and UCO Two, UCO Three’s board shows a higher level of engagement in the company’s HR matters. In addition to the HR briefings similar to those for UCO Two, the general manager HR attends board meetings at times to explain or introduce particular HR initiatives or aspects. These differences in boards’ attitudes show that HR is viewed as having higher strategic importance in UCO Three.

HR Systems and alignment

Interestingly, despite the significant divergence between the three UCOs’ strategic orientation and clear distinction between their HR goals, their actual HR practices share similarities. The dissimilarities among the three organisations’ HR practices, especially in the knowledge, skills and abilities domain, more often reflect differences in level of sophistication rather than differences in approach. However, there are still differences that

stem from different HR strategic foci. The following sections compare and contrast HR practices implemented for each HR domain for the three cases:

- ***Knowledge, skills and abilities domain***

The three UCOs' HR practices show strongest similarities in this domain, yet there is still a number of differences. UCO Three has the most mature HR planning and talent management process in place by far, while UCOs One and Two are still refining activities such as recruitment and development needs analysis. All three carry out recruitment through a mixture of channels including web advertisement, word of mouth and recruitment agency. UCO One has the highest proportion of new recruits coming through word of mouth and networking, while most of the new hires come from web advertisement (junior roles) and recruitment agencies (senior roles) for UCO Three. In terms of the selection criteria, UCO One values postgraduate degrees for technology commercialisation roles (ideally PhD and MBA) the most out of the three cases, while UCO Three does not list postgraduate qualifications as one of the selection criteria and values relevant industry experience much more. UCO Two is somewhere between the two. This may be relevant to the fact that UCO One identifies more with the academic environment, whereas UCO Three believes that it is primarily a commercial entity. This also matches their respective organisational strategy.

Recruitment and selection are manager-initiated processes in UCOs Two and Three, with HR playing a supportive role. As most of the line managers are still relatively inexperienced in UCO One, HR initiates and conducts most of the recruitment and selection activities. All three UCOs employ a combination of selection techniques including phone screening, panel interviews, testing (or work samples) and reference checking. UCO Three is the only one that requires candidates to go through psychometric testing and has two additional stages including "pre-interview meeting" and "meet the team" for more senior roles. The combination and number of selection stages can be different depending on the position and time of recruitment (processes becoming more rigorous and standardised with time) in all three cases.

All three organisations have a standard organisational induction process, which involves introducing the new member to company policies, regulations and other staff members (especially those who are relevant to the new employee's role). Training is carried out

through handover and/or on-the-job training, reflecting the complex nature of UCO roles, which make it impossible to formulate a standard, “cookie-cutter” training program.

Every UCO reports that budget is a main constraint that limits staff development and initiatives. Types of development opportunities and the ways in which these are coordinated are rather different between the three UCOS. UCO One emphasises whole-company development activities that focus more on general topics (e.g. emotional intelligence). For UCO Two, the development opportunities are still individualised and approved on a case-by-case basis. Both UCOS One and Two are in the process of strengthening linkages between performance development discussions and actual development activities. In comparison, staff development is much more coordinated in UCO Three and this organisation makes the most effort to leverage its resources. It not only coordinates cross-functional development programs, makes most use of university courses, but also encourages staff learning through networking events, peer coaching, knowledge-sharing and taking up new internal projects or responsibilities.

- *Motivation and effort domain*

All three cases carry out individualised performance development (management) discussions and allow employees to participate in their own KPI setting (within the boundaries of their own position descriptions). UCO Two is the only organisation that does not make use of team KPIs, yet it is possible to consider organisational initiatives (which do not exist in the other two cases) as team KPIs due to the small size of the organisation. In UCO One, everyone has team components that are performance-driven and individual components that are behaviour-driven. The mixture of team and individual components varies between role types in UCO Three, ranging from contract administrators who only have individual KPIs to line managers who have individual, team and company components and general managers whose performance is rated by individual and company KPIs.

At this stage, UCOS Two and Three have clearer processes that allow company objectives to filter down to team and personal KPIs. UCO Three makes use of a rigorous consultative process between each level to ensure that individual KPIs feed into team and ultimately organisational goals, while UCO Two’s organisational structure and size allow everyone to take part in organisational objective-setting and decide on which goals apply to their roles. Partly due to issues that are yet to be addressed resulting from organisational restructuring

early 2012, performance review procedures are still in the process of refinement and standardisation in UCO One. This is also the only company that specifically incorporates company values and behaviours in each staff member's KPIs, which corresponds to its HR strategic focus on fostering conformity.

The managers in all three companies carry out performance rating for their direct reports. Most employees suggest that the rating process is consultative, where they sit down with their managers to discuss how they believe they have performed, with only a few exceptions in UCOs One and Two. UCO Three also has a calibration exercise, during which line managers, senior management team and HR general manager debate and discuss all the ratings to ensure equity across different managers' ratings. This is especially important for staff members who have a larger incentive associated with their performance (usually BDM).

Staff members of all three organisations receive a set salary with incremental pay increase year to year (the actual percentage depends on performance evaluation). As of 2012, UCO Three is the only company that has an incentive scheme. Employees receive a bonus ranging from five percent to 25 percent of their salary, depending on their role, their own performance, and the company's performance. UCO One does not have a bonus system, whereas UCO Two is still revising its incentive mechanism and has not yet decided whether it wants to implement a bonus system (it had one prior to the 2011 restructuring). Where present, this shows direct association between the UCOs' strategic orientation (focus on revenue) and incentives by bonus.

Despite the differences in incentive structure (and availability) between the three cases, informants' descriptions of their work motivation are largely congruent. Financial rewards are of less importance and informants from all three UCOs suggest that they are intrinsically motivated by factors including having a genuine interest and passion in their roles and the flexibility or autonomy provided by the nature of their jobs. Other less common motivators include being a university alumnus wanting to help the university (UCO Two), taking pride in the company and appreciate the development potential that the company offers (UCO Three). Only one informant (from UCO One) believes that some people in the company have lost their motivation.

Career progression remains somewhat limited in all three cases due to relatively flat organisational structures. UCO One is now attempting to address this by creating new team

leader positions and providing more chances for people to take up new responsibilities. Informants from UCOs Two and Three acknowledge that there are opportunities to move horizontally, and as both the organisation and the commercialisation environment are still evolving, roles that are non-existent now may be created in the future. UCO Three provides slightly more options than UCO Two via its research institutes, and is again better at leveraging limited resources and opportunities by providing development possibilities through internal secondment (taking up new responsibilities)

- *Opportunities to contribute domain*

Informants from all three cases report having high levels of job autonomy. In other words, they can decide how they want to approach and complete the tasks or even define their roles if they are in newly-created positions. Day-to-day flexibility with work location and work hours is also high in all three cases. UCO Two's practices especially stand out in this domain, as it operates a high-involvement model where every employee has input into setting company objectives, determining changes that should be made and deciding processes that can be enhanced to increase organisational efficiency and effectiveness. Staff members discuss and nominate what they believe the organisation should be achieving in line with its strategy, and every employee is also involved in multiple "working groups" that work on revising and improving particular organisational areas. This company's HR strategic intention to enhance flexibility creates a synergistic effect with the high-involvement model, which together provides its staff members with considerable opportunities to contribute.

As outlined in Chapters Four and Six, both UCOs One and Three are geographically dispersed. UCO One is spread across two university campuses, whereas UCO Three has a number of research centres spread across the country. Therefore, both UCO One and UCO Three identify cross-functional communication as an issue. The fact that UCO One is spread across two different campuses adds to the challenge, making it more difficult to mitigate issues with horizontal communication. UCO One tries to address this issue with a top-down approach by organising more whole-company development programs and activities, while bottom-up attempts to enhance horizontal communication are initiated by work teams in UCO Three (e.g. teams inviting colleagues from other parts of the company to afternoon tea meetings). There are also company-wide leisure activities and a few cross-functional meetings for BD staff in UCO Three, in addition to quarterly whole-company meetings hold by the CEO.

Informants from UCOs One and Two also identify vertical communication problems, but this is becoming less of an issue in the case of UCO Two as a result of the recent restructuring and strategic change. For UCO One, although communication between employees and their direct manager is open and direct, there is limited contact between most employees and the strategic level and there is a lack of mechanisms to ensure that staff members from every division or team are receiving the same message. This has led to some confusion over some company processes, such as pay increase rationales.

In terms of alignment between different HR activities, all three UCOs report that performance appraisal is supposed to tie into development, yet UCO Three is the only organisation that has integrated these two activities systematically. In addition, performance appraisal is also related to remuneration and incentives, with the alignment again being the strongest in UCO Three. Regardless of differences in recruitment and selection practices, there are no clear associations between these activities and other downstream practices such as training and development or performance management in any of the three UCOs. None of the UCOs has a feedback system that evaluates the effectiveness of recruitment and selection. Finally, although not clearly articulated, the flexibility in work approach, time and condition that all three cases offer does provide their employees with sufficient opportunities to contribute and thus meet their performance requirements and attain incentives where possible.

Managerial intentions: from rhetoric to action

UCO Three has the best match between managerial rhetoric and action, an achievement that attributes to its long-term stability and successful choice and implementation of the “HR as business partners” model. By allowing the line managers to decide how they want to manage their teams (and clearly articulating this rationale), this organisation avoids the separation of managerial rhetoric or espoused intention and actual practices (Boxall & Purcell, 2011; Grant, 1999; Nishii et al., 2008), and thus decreased the likelihood of disconnections between rhetoric and action. This organisation also has various procedures in place (e.g. performance rating calibration exercise, HR checking/ supporting practice implementation across the whole company) to ensure HRM equity and coherence. However, this means that each team has its own unique dynamics and it is not possible to establish standardised work approach or attitude for the whole company. This is a fact acknowledged by UCO Three’s informants across all levels (strategic, middle-management and employees).

As UCO Two is yet to decide on and finalise many of its HR policies and practices, it is difficult to judge whether there are differences between managerial rhetoric and action. However, it is possible to envisage that UCO Two's matrix (and very flat) organisational structure and high-involvement model together can decrease chances of misalignment between managerial rhetoric and action. There are no elaborate, complicated processes or layers that may hinder the translation of decisions made at the strategic level to actual practice implementation. Although one informant believes that there still remains some "secrecy" with final decision-making at the strategic level, the company is trying to increase transparency in all procedures and the proximity and frequent contact between all staff members should facilitate this process.

Stemming largely from communication issues, the level of discrepancy between managerial (or strategic) rhetoric and action is the highest for UCO One (out of the three cases). Having only one single channel of top-down communication that solely relies on message-passing from one level to the next level down makes separation of rhetoric (or intention) from action more likely to occur. One example that illustrates this challenge is that, in spite of strategic intention to formalise and standardise performance appraisal and development discussion, there remains a huge difference in performance development discussion experience between staff members from different teams and divisions. Another example is the ambiguity and different (or lack of) understandings of how pay increases associate with performance rating. Some of these issues may simply be temporary effects that result from restructuring and can be mitigated once the strategic level firmly reinforces new policies and procedures, while other challenges may be rooted in the company's history and context and may require more effort and time to be addressed.

Intended climates achieved?

All three UCOs are achieving their strategic goals (or, in the case of UCO Two, is headed towards achieving the newly-set goals), yet the extent to which their respective intended HR objectives or climates are achieved is quite different. UCO Three has established an HR partnership model directed to staff capacity-building successfully. Therefore UCO Three's intended HR climate is well-achieved. Each team also develops a culture or climate that is appropriate for the team members and nature or role, often through an organic, bottom-up process, yet there are cases where staff members self-select into teams that they believe match their working styles better and it is also possible that HR activities such as selection (e.g. "meet the team") and development help shape the team climate

implicitly. Therefore the shaping and forming of the team climate may not be as natural and organic as staff members would believe. Nevertheless, this does not prevent this UCO from achieving its capacity-building HR intention.

Despite the paradigm shift having taken place relatively recently, UCO Two’s HR intention to develop flexibility is articulated clearly across the whole organisation and informants also appreciate the idea of organisational and work flexibility. With support from its board, this organisation appears to have made a clean separation from its past and is going through an elaborate process to realign its practices with the new organisational and HR strategies. Staff members are not only encouraged to put forward their own opinions but are also incorporated in most evaluation and improvement discussions. Although this UCO is yet to decide on and finalise a number of its HR practices, the above factors make the achievement of its intended climate hopeful and promising.

Out of the three cases, UCO One appears to be the farthest from achieving its intended climate due to various technical and historical difficulties. One of the main factors that hinder the company from achieving conformity is the fact that it is formed from two institutions that were not only very different in their company models and strategies historically, but were also located on different campuses. In addition, as most communication remains within teams, employees lack the opportunity to put company values and behaviours into practice, make observations and induce a vicarious or social learning process beyond the few people that they meet and work with day-to-day. Most informants also admit that they cannot easily recall many of the company values. While there are whole-company development activities, these ad-hoc or irregular occasions do not constitute conditions that are strong enough to create and maintain the feeling of “oneness” and organisational identity.

HR architecture mapping

Based on the above, Table 7.3 matches the three cases’ HR constructs to the HR programs and level of sophistication developed by Ridder et al. (2012):

Case	HR programs	Details and representative data	HR sophistication
One	HRM investments [Low]	Limited budget <i>E.g. “I wanted to do more training but have not been able to...because we don’t have the money for it” (Interview 25)</i> 3 HR staff members looking after 67 staff members Moderate levels of HR practices applied; quality and intensity improving	

One	Alignment of HR practices [Weak moving to moderate]	Current focus still on standardising each HR activity; weak alignment between HR activities such as performance development, actual development, recruitment and selection and ambiguity around performance appraisal and remuneration/ incentives <i>E.g. “Well I don’t think there’s any point to (performance discussions)...because like I said, there’s no training that you can get from it” (Interview 26)</i>	Rudimentary / semi-sophisticated
	Proportion of workforce covered [Moderate]	Little difference between different staff member’s access to HR practices and HR investment received (yet intensity of HR practices is not high)	
Two	HRM investments [Moderate]	Limited budget but leverages some resources (e.g. conferences, some attends university courses) <i>E.g. “We have a fixed budget...we have to be really frugal as to how we use those resources” (Interview 39)</i> 1 HR staff member looking after 31 staff members Moderate levels of HR practices applied; moderate quality and intensity	Semi-sophisticated
	Alignment of HR practices [Weak moving to moderate]	Still in the process of realigning HR activities with new strategy, but aligning HR practices already on the agenda. <i>E.g. “Later on this year we will be looking at doing more formal learning needs assessment with staff, so that discussion within the performance review process next year and the setting of KPIs will be more cohesive and productive” (Interview 35)</i>	
	Proportion of workforce covered [Large]	Although many HR practices vary depending on individual circumstances, employees’ needs are mostly met.	
Three	HRM investments [Moderate]	Limited budget but effective at leveraging resources <i>E.g. “Any of our core initiatives are limited by budget and resources, so we have to priorities” (Interview 71)</i> 6 HR staff members looking after 85 (corporate)/ 700 (including research institutes) Numerous and relatively intense HR practices applied	Semi-sophisticated
	Alignment of HR practices [Strong]	Clear alignment between most practices. Only need to better align recruitment and selection <i>E.g. “We do use psychometrics, but we don’t close the loop...there’s no feedback loop that says “we’ve done this 360 and this is disclosing this” (Interview 70)</i>	
	Proportion of workforce covered [Moderate]	UCO distinguishes different employees’ value and capacity via talent management. Company places more focus on those who are identified as having more potential. BDMs may receive more HR investment (e.g. tailor-made development programs) than others.	

Table 7.3: HR program sophistication for each UCO

Common HR challenges

There is a number of common HRM challenges across all cases, including 1) difficulty in finding suitable candidates with the right skillset during recruitment, 2) lack of standard or suitable or readily-available development programs, 3) budget constraints that limit staff development (especially when it comes to attending courses or programs), 4) challenges around associating quantitative indicators (such as revenue) with personal effort and thus performance appraisal, and 5) volatility in the commercialisation environment, which adds difficulty to HR planning (or even job and role definition).

At the interface of university (academia) and industry, UCOs require employees (especially BD staff) who have both industry or business experience and an understanding of academic environment. UCO staff members need to be able to act as the conduit between profit-focused business sector and research and teaching-focused academic environment, as well as to manage the two sectors' different expectations and communication styles. UCO One, which has a strong academic orientation, prefers BD staff members with higher qualifications, preferably at the PhD level, in addition to adequate levels of business background. These combinations of skillset and qualification are rare, yet are argued to be necessary for research commercialisation success.

Extending from the above, currently there are not many development programs that can readily meet the needs of commercialisation staff and these organisations need to hunt for programs or events from various areas, ranging from marketing, sales, communication, academic and technology transfer conferences, and “patch” these up to meet their unique developmental needs. An alternative solution is to invest in tailor-made programs, a solution adopted by UCO Three, yet this is only economical when the specially-made program suits the job nature of many staff members. UCO Three also accesses university (mostly business school) short courses the most out of the three cases.

Another common HR challenge across all three cases is organisational budget constraint. As the university only provides its UCO with a set “bucket of gold” every year, these organisations need to be extremely careful with how they allocate their budget. Unlike other organisations in the private sector, financial success from the previous year for UCOs does not directly lead to increased availability of funding. This is because all financial gains generated by the UCO need to be returned to the university. This also makes it

necessary for UCOs to leverage their limited resources and options to maximise employee development opportunities.

The fourth challenge applies mostly to BD roles. Although income generation is one of research commercialisation's main purposes, financial indicators are not effective measurements of BDM efforts for various reasons. First, there is usually a time lag that can be up to a few years between commercialisation negotiations or planning (which requires most BD effort) and actual income generation. Second, BD roles, by nature, often entail a lot of work and effort that does not result in successful projects or outcome due to various reasons that are beyond BDMs' control. Third, commercialisation outputs such as patenting, licensing and spin-offs often do not generate much profit and it is also highly likely for spin-off companies to operate at a deficit at their initial stages. Therefore, unlike traditional sales positions, the amount of revenue generated is not a helpful measurement of BD efforts as its financial success is subjective to too many contextual factors and other stakeholders.

Again, being at the academic-industry interface, changes and regulations that affect both sectors will also impact UCOs' strategic direction, available resources and performance. It is therefore hard to anticipate future HR needs and the nature of some roles may evolve and change according to organisational development stages and needs, industrial trends and stakeholder interests.

7.4. HR Architecture and Employee Perception

UCO Three receives most positive employee appraisal overall regarding HRM practices. The following sections relate employee perception dimensions to different HR practices; these employee perception dimensions, together with HR program dimensions, form HR architectures.

Employee perception dimension one: Perceived quality of implementation

A number of informants from UCO One feel that the purpose of some HR activities is just to "tick the boxes" and they do not find these practices particularly meaningful. This links back to the missing associations, for example, between performance development discussions and actual development activities, which lowers employees' perception of HR implementation. However, informants who have experienced the newly implemented HR practices (e.g. training for new team leaders) complimented these activities.

At this stage, HR practices in UCO Two have a strongly practical orientation, which are often designed and implemented on a case-by-case basis and do not have a set of clearly articulated rationales that direct these activities. For instance, employees communicate with their managers directly regarding training or development programs that they are interested in and attend these programs with manager support. The recruitment process can be extremely complicated or simple depending on the position, time of recruitment and staff members in charge of selection. In other words, practices are implemented contingently to fit the immediate needs of the employees and the company. Although it makes employees relatively satisfied, this approach is only feasible in the organisation's current small size.

Informants' perceptions of UCO Three's HR practices are rather standard. Most agree that these practices are understandable and useful, although quite a few informants do refer to recruitment and selection processes as being stringent or too laborious. Nevertheless, informants perceive other activities such as training and development, vertical communication and remuneration positively.

Employee perception dimension two: Usage by employees

Usage of HR practices is again perceived to be lower for UCO One. Due to the organisation's constant changes and restructuring, the visibility, availability and consistency of HR practices over time have not been strong. Some of the employees who have been around for a long time describe fewer HRM activities from the past at their time of joining. Some of these informants also appraise HR usage negatively. Since the process of standardising and clarifying HR policies and practices that began early 2012 (and is still on-going), some informants, for example the newly-promoted team leaders, are appraising HR usage positively now.

In midst of two major organisational crises that took place around 2005 and 2011 respectively, HRM has not been a key organisational focus for UCO Two. Therefore informants focus more on organisational viability rather than HR usage during their recount of past experience. Nevertheless, these descriptions provide indirect support for inconsistency of HR usage. The previous CEO is described to have joined the company to set up processes and procedures, indicating the lack of such order prior to 2005. As the leadership styles of the previous CEO and the current CEO are "diametrically opposed" (Interview 46), and with the HR practices being under revision currently, it is reasonable to

infer relatively low levels of HR consistency over time. However, this is not to say that the visibility and availability of HR practices are also low. Most informants are satisfied with their HR requests being addressed and needs being met, and are also aware of the processes that are under revision. Therefore despite the lack of strong HR consistency, informants do not appraise HR usage negatively.

HR usage is the most stable for UCO Three's employees. The sophistication of HR practices has increased with time, yet remains consistent and there had not been radical changes. There is one single instance in which one employee was promoted without having to go through an internal application and selection process, while shortly after her another employee (in a similar situation) had to apply and compete with other internal applicants for the same promotion. However, this is more of an issue with the two staff members being immediately before and after the formal establishment of this new role, with the first employee being 'given' the promotion as a trial of the newly-created leadership role, and the second employee being the first to go through proper internal selection process for promotion.

Employee perception dimension three: Perceived fairness

Although there were some differences between informants' experience of HR practices ranging from length in time and complexity of selection process, types and number of development programs attended, to communication frequencies with managers, informants from the three organisations do not perceive these as issues of fairness. Informants accept these as variations that correspond to the need and nature of different roles. While many people mention budget placing a significant constraint on HR capacity, this is again an accepted fact that does not incur negative appraisal or comments.

Instead, negative perceptions of organisational fairness mostly stem from communication problems or confidentiality. In UCO One, the strategic level is unable to explain clearly to the employees the reason behind the dismissal of two managers due to issues with confidentiality, which led to employees doubting organisational fairness. A few informants also mention the lack of rewards for better performance, which stem from the ambiguity in pay rise rationales. This is in reality more of a top-down communication issue. Table 7.4 summarises these employee perception dimensions.

Cases	Dimensions	Employee perception of HRM: representative data	Overall appraisal
One	Perceived quality of implementation [Low moving to moderate]	<p>Prior to restructuring and HR standardisation: <i>“They rely on those people to teach other people, but they don’t give those proactive people any sort of support to formalise that and roll it across all teams” (Interview 17)</i></p> <p>After restructuring and during HR standardisation: <i>“I think (performance management) is just something to tick off the checklist to say that we’ve done it” (Interview 26)</i> <i>“I think the process after the restructure has been quite good” (Interview 27)</i></p>	Negative moving to moderate (more positive for new and revised practices)
	Usage by employees [Low moving to moderate]	<p>Staff development opportunities such as promotion to team leaders and taking up more responsibilities can only cover a small proportion of employees. Weak HR practices consistency over time, primarily due to changes and restructuring:: <i>“There was not any (induction) for me (when I joined)” (Interview 17)</i> <i>“I did (experience induction) and it was fantastic. I was given a schedule straight off... It was very comprehensive” (Interview 12)</i></p>	
	Perceived fairness [Moderate]	<p>Issues with lack of rewards for better performance, and also some comments on fairness and equity issues (stemming from vertical communication problems): <i>“We’re all still wondering why this person was retrenched in March. I think maybe there was a personality clash somewhere” (Interview 17)</i> <i>“There’s not any internal career opportunities...if you are doing more work than someone else, and you know they are on the same pay as you. That seems unfair” (Interview 26)</i></p>	
Two	Perceived quality of implementation [Moderate to high]	<p>High levels of bottom-up initiative with own HR activities and HR practices implemented to suit situation; therefore HR practices highly understandable for employees: <i>“Whatever you are interested in attending is up to you, and if it is approved by the manager, then you can go...The type of training depends on your role...it’s individual” (Interview 48)</i></p> <p>However, the relevance for company becomes less obvious: <i>“Conference or an exhibition...why send those people to (the events) if there’s no feedback? ...Individual benefit could be great...but I wonder how useful actually is that for (the company), and it costs a lot of money” (Interview 46)</i></p>	

Two	Usage by employees [Moderate]	Weak HR practices consistency over time due to changes and restructuring. However, although not structured , required practices were available: <i>“My first induction- we didn ’t have an induction process really...there was nothing structured...last year with the new CEO one of the initiatives that we have was to create an induction process...(Last year) there was a couple of loose-leaf...but nothing very formal...(This year we have) this whole folder here” (Interview 38)</i>	Moderate to positive
	Perceived fairness [High]	No discrimination among different employees; everyone has input into the company’s strategic plan: <i>“We’ve had a review of the company, how it works, everyone has had input into how it should work” (Interview 37)</i>	
Three	Perceived quality of implementation [High]	HR practices initiated by direct managers; therefore no ambiguity with usefulness of these activities: <i>“The HR division is here to support us in making sure that we have skills within our team members to achieve the strategic drive of the company...We require the HR support in doing that” (Interview 67)</i> Team members also take some initiative with addressing organisational challenges: <i>“...monthly lunches...That’s our team’s initiative, to work with the cross-team (communication) stuff” (Interview 75)</i>	Positive in general
	Usage by employees [Moderate to high]	HR practices mostly consistent over time: <i>“I think they were trying hard when I joined and they are trying even harder now...there has always been at least some emphasis and some focus on training and learning and development” (Interview 72)</i> With a few exception before and after position/ process standardisation: <i>E.g. “The person who has the job at the moment was just given it, and there was no advertising or recruitment process...They’re now advertising the position in my team rather than giving it to me” (Interview 69)</i>	
	Perceived fairness [High]	Although company adopts talent management, but informants views HRM as having high level of fairness. There are also processes in place to ensure equity and fairness: <i>“The other purpose of the calibration process is to really ensure that people are really thinking in the same way and applying the same standards...You’d want to balance that out a bit so that it’s fair and robust” (Interview 71)</i>	

Table 7.4: HR practices and employee appraisal for each UCO

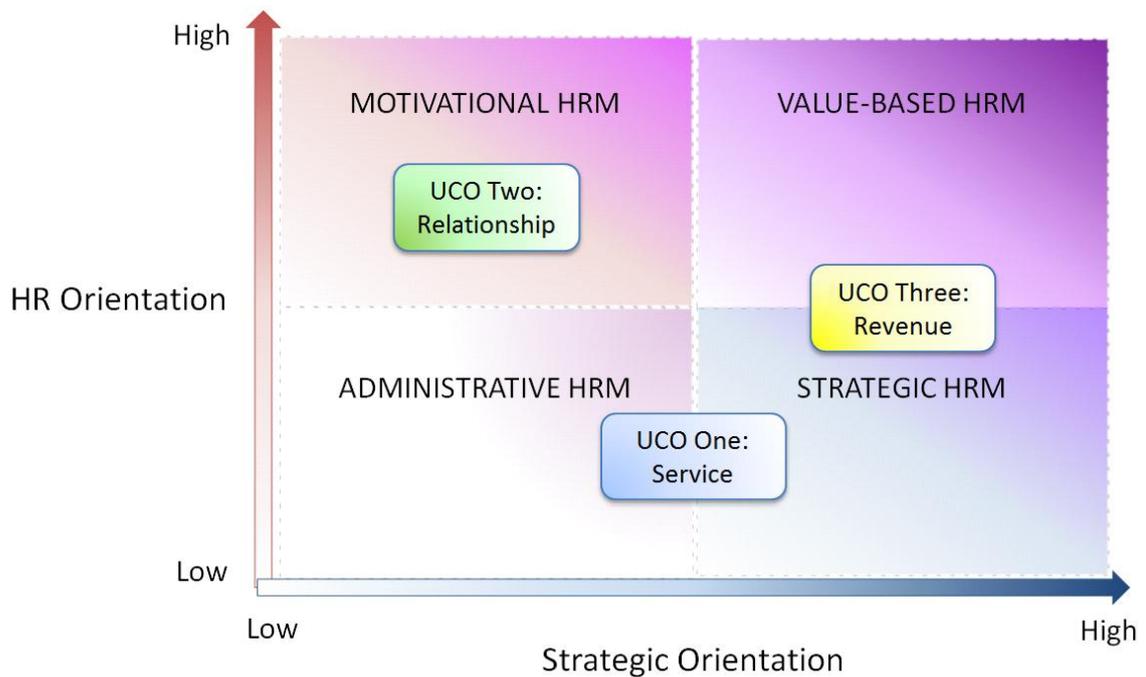
Based on the data presented in Tables 7.3 and 7.4, Table 7.5 below matches the HR architecture second-order factors for the three cases:

	HR Programs			Employee perception of HRM		
	HRM investments (Ratio of HR staff to total employees; number, quality and intensity of HR practices applied)	Alignment of HR practices (Degree of vertical and horizontal fit of HR practices)	Proportion of workforce covered (Percentage of employees covered by the firm's HR practices)	Perceived quality of implementation (Employees' perceived understandability and usefulness of HR practices)	Usage by employees (Visibility, availability and consistency over time of applied HR practices)	Perceived fairness (Employees' perceived equality of access to HR practices)
UCO One	Low	Weak → Moderate	Moderate	Low ~ Moderate	Low ~ Moderate	Moderate
	Rudimentary → Semi-sophisticated HR programs			Negative → Moderate employee appraisal of HR practices		
UCO Two	Moderate	Weak ~ Moderate	Large	Moderate ~ High	Moderate	High
	Semi-sophisticated HR programs			Moderate ~ positive employee appraisal of HR practices		
UCO Three	Moderate	Strong	Moderate	High	Moderate ~ High	High
	Semi-sophisticated HR programs			Positive employee appraisal of HR practices in general		

Table 7.5: HR architecture matching based on HR programs and practices

In line with previous research finding that multiple HR systems can exist within an organisation (Kalleberg et al., 2006; Lepak & Snell, 1999; Lepak et al., 2003), this research finds that the mixture of HR architectures reflects different HR systems within a UCO (note that none of the UCOs displays second-order factor ratings that correspond to one single 'ideal type', as displayed in Table 7.5); however these systems are often not clearly defined, or there may only be one or two HR practices that are different between the HR systems. In other words, HR practices and systems in UCOs remain extremely flexible and many activities (e.g. recruitment) can be adjusted on a case-by-case basis. The differences in a UCO's HR systems can be subject to a number of factors: 1) organisational development (different practices adopted at different points in time); 2) different groups of employees; and 3) manager and team culture; Based on the data presented in Table 7.5, Figure 7.4 maps the UCO strategy by HR architecture for the three cases. In general, UCO One is moving from administrative HRM to strategic HRM. UCO Two's HR architecture resembles motivational HRM the most. UCO Three's HR architecture shows a mixture of both strategic HRM and value-based HRM characteristics.

Figure 7.4: Mapping of three UCO cases/ models by HR architecture



Commentary on the HR architecture model by Ridder et al (2012)

Overall, this research finds Ridder et al’s (2012) HR architecture model effective. It comprehensively maps the interconnectedness of underlying HR components within HR architectures. The classification of four representative HR architecture “ideal types” along the two dimensions of HR orientation and strategic orientation enables easier categorisation and identification of different HRM configuration rationales and approaches. By identifying distinct HRM architecture types, it becomes easier to account for linkages between HRM configurations and organisational strategy. Therefore, this model is useful for examinations of how organisational strategy affects HRM.

In addition, this model’s clear separation of HR programs and employee perceptions on HRM into two different mechanisms contributes to the understanding of possible differences between managerial actions and employees’ experience. As discussed in section 2.5, HRM research needs to take into account possible disconnection between managerial intention, actual HR practices, and employee appraisal of HRM. Ridder et al’s (2012) model captures this distinction effectively.

On the other hand, this model also has two limitations. First, at its current form, Ridder et al’s (2012) model left the rating for employees’ perception of HRM to the researcher’s

own verdict. The fact that employee perceptions are subject to the organisational context makes it difficult to develop a precise rating system that is applicable to every organisation. This means that employee appraisals that one researcher considers to be “positive” may sound “moderate” to another researcher, and the comments that one researcher sees as representative may appear less important to another researcher. While it is unlikely for different researchers to draw highly contrasted conclusions based on the same data (e.g. it is unlikely to have mistaken a clearly positive compliment as a negative comment), there may still be some discrepancies between different researchers’ interpretations. In addition, employees most often do not have one clear perception of the company’s HR practices. Most people will have different views on different aspects of the organisation’s HRM and may find some practices more effective than others. This makes the decision on a final rating for the overall employee perception of an organisation or HR architecture (based on collective appraisal) an equally subjective process. Although the interpretivist paradigm acknowledges that informants’ experiences are unavoidably mediated by the researcher’s own perceptions, and such challenge does reflect the complexity of HRM in reality, this limitation may affect the extent to which comparisons made across different studies applying this model are reliable.

Extending from the above, another limitation of this model is the lack of standardisation on what constitutes “high”, “moderate” or “low” HRM investments and proportion of workforce covered, and what “strong”, “moderate” or “weak” alignment of HR practices means. This may not be an issue when comparisons are only made between different HR architectures or different organisations in the same study (by the same researcher), provided that the researcher adopts the same measurement and standard across all cases. However, again, given the clear distinction between the four HR architecture ideal types, although different researchers’ interpretations should not be overly divergent, such ambiguity may affect the accuracy of comparisons made across different studies.

7.5. Theoretical model

The main purpose of this thesis is to find out how UCOs configure HRM to serve their commercialisation strategies. There are three research objectives: 1) To find out how different commercialisation strategies affect HR strategies; 2) To find out what HR architectures are implemented to serve the respective HR strategic intentions, and whether these actions align with strategic or managerial rhetoric; 3) To find out whether the HR

architectures (in the form of HR programs and practices) deliver the intended outcome in the form of employee perceptions. In order to address the main purpose and the research objectives, based on the original conceptual research model (Figure 7.5a), this thesis presents the following refined model (Figure 7.5b):

Figure 7.5a: Original conceptual research model

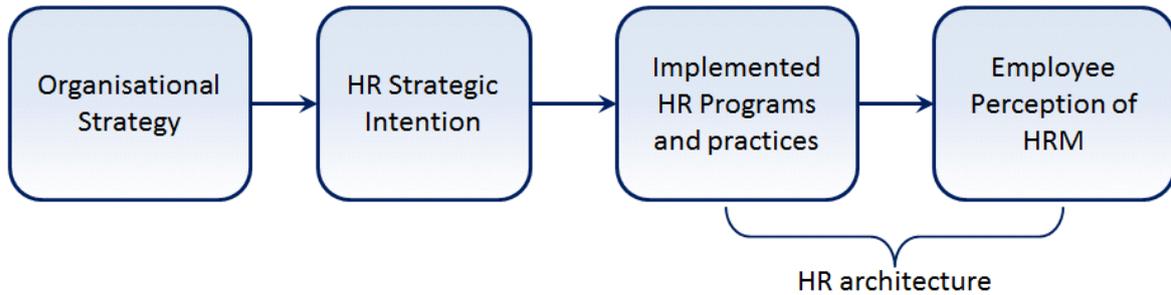
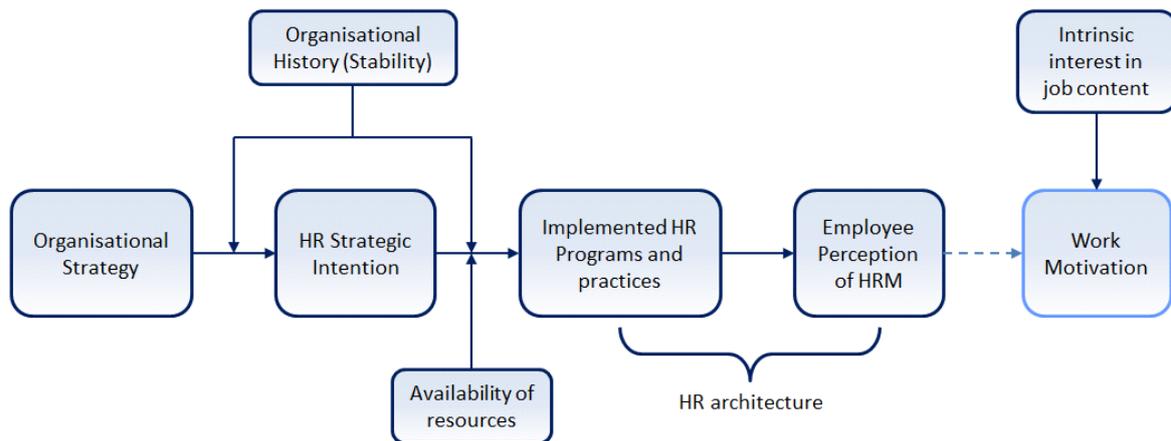


Figure 7.5b: Orientation of HRM to serve UCO strategies



The organisational strategic model refers to the commercialisation strategy that the UCOs adopt, whether it is more service-oriented or revenue-oriented, and more university-oriented or industry-oriented. HR strategic intention represents the UCOs' strategic intention regarding what climates, culture and objectives they want to create or achieve through their HRM practices. These HR intentions then translate to the design and implementation of actual HR architecture in the form of programs and practices. However, there can be misalignments or miscommunication between HR strategic intention and implemented HR practices. The translation of HR strategic intention to implemented HR architectures is moderated by intervening variables including availability of resources (e.g. budget, development opportunities availability, talent pool) and organisational history (e.g. predecessor, restructuring). Organisational history also moderates the relationship between

organisational strategy and HR strategy, with HR strategic intentions reflecting what the company needs to address resulting from its history or restructuring. Based on the implemented HR architectures, employee may have positive, moderate or negative appraisal on different aspects of the HR system and the UCOs' HRM in general. Employees' appraisal of HRM has an indirect effect on their work motivation, which seems to be driven largely by their love of the nature of university commercialisation roles and the flexibility it allows rather than the availability and effectiveness of HRM per se. Nevertheless, absence of effective and clear HRM leads to negative perception of the company and decreases the level to which employees identify themselves with the company.

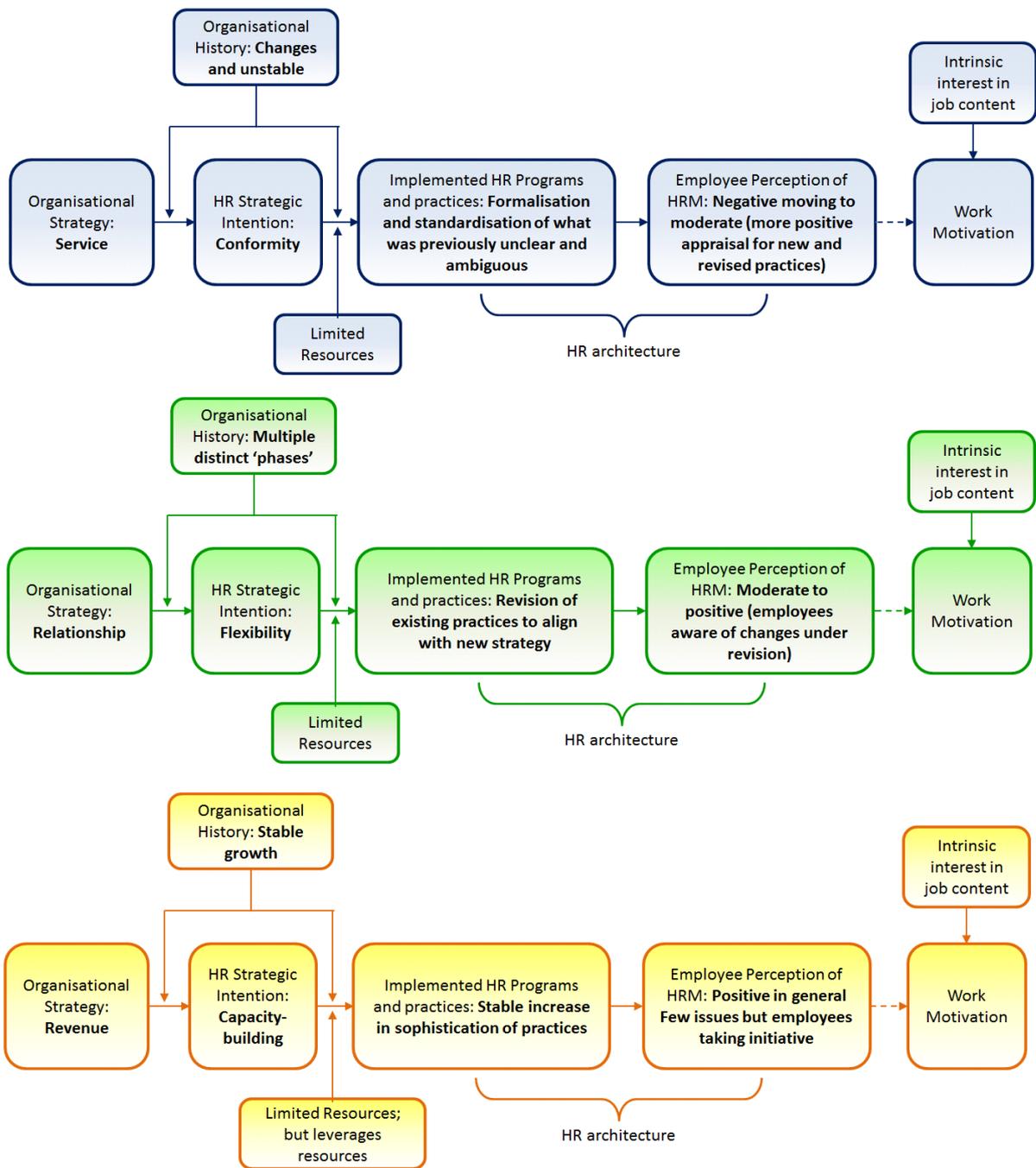
Figure 7.6 on the next page maps each of the three investigated cases to the theoretical model as presented by Figure 7.5b.

7.6. Chapter summary

This chapter discussed and analysed research findings by making cross-case comparisons. It first evaluated differences in organisational strategies between the three cases and presented three models that mapped the foci of UCO strategies, factors that determine UCO strategies and factors that influence UCO effectiveness respectively. The second section compared the HR strategies and implemented HR systems for the three cases. Based on these comparisons, it then rated and related each case's HR program sophistication to the four 'ideal' types of HR architectures, and located the three UCO models within HR architectural boundaries. The third section examined linkages between HR practices and employee appraisal of HRM. Finally, this chapter concluded with a theoretical model and a map of the three UCOs according to the theoretical model that address the purpose of this research and the three research objectives that derive from the main purpose of research.

The next chapter concludes this thesis by reviewing the highlights of research findings, discussing these findings, outlining the contributions and limitation, and finally identifying areas for future research.

Figure 7.6: Theoretical mapping of strategies and HRM in the three UCOs



CHAPTER EIGHT: DISCUSSION AND CONCLUSIONS

The main purpose of this research is to investigate the HRM configurations that serve university commercialisation strategies by studying university commercialisation organisations (UCOs). Three research questions informed this research:

- 1) How do different UCO strategies inform HR strategy and intended organisational climate?
- 2) What HR architectures are in place and to what extent do the HR architectures create the intended climate?
- 3) How effective are the HR programs and practices in delivering the intended outcomes in the form of employee perceptions and appraisals?

This research answered the research questions by adopting a multiple case studies approach and examining three UCOs, with interviews as the main data collection method. Chapters Four, Five and Six presented results from each of the three research cases separately and Chapter Seven presented analysis of cross-case findings. This chapter now discusses and reviews the research findings, contributions and limitations of this research and concludes with directions for future research.

8.1. Highlights of Research Findings

Research Question One: How do different UCO strategies inform HR strategy and intended organisational climate?

The key empirical findings of this research found three different UCO strategic models along two dimensions of internal (university) versus external (industry) focus and service versus revenue focus. It is important to note that every UCO's strategy pays a certain level of attention to every component (university, industry, service and revenue), yet UCOs may be configured in multiple ways around the components. First, a "service-based" commercialisation strategy is internally and service-focused. It aims to provide a commercial service for the university (and its academics) through utilising its commercial entity and structures. These services may include cutting costs for the university and customising non-standard educational programs for faculties and departments. Second, a "relationship-based" model sits in the middle of both continuums as its strategic goals incorporate balanced internal and external foci, as well as service and revenue foci. Its

main objectives are to establish long-term organisational sustainability by covering all three aspects of university commercialisation, including academic service, public awareness and revenue generation. In order to achieve these objectives, it is crucial to build positive relationships, communication channels and networks between academia and industry. Third, a “revenue-based” strategy is externally and revenue-focused, as it emphasises the generation of financial returns from university research output. Measurements of organisational performance are primarily based on revenue growth. As income generation is at the core of this strategy, it becomes more important for the UCO to understand and serve the needs of the industry (external) partners, who hold the funding for investment.

HRM differences between the three cases are subject to different strategic imperatives, organisational history, contextual contingencies and levels of organisational maturity. Such maturity has more to do with organisational history and external context rather than length of time since establishment. For example, while UCO Two is the oldest of the three, UCO Three has the highest level of organisational maturity due to its stability.

While every UCO acknowledges “building a positive and happy work environment” as an important HR goal, corresponding to their respective strategic models, each UCO has a different HR strategic focus that corresponds to its commercialisation strategy. UCO One orients its HR strategy to foster conformity in order to better integrate different functions across the organisation and standardise the quality of services provided to the university and its academics. Due to the internal (university) focus, this organisation makes the most use of word-of-mouth and networking as recruitment channels to identify candidates who can better understand the academic environment, and this UCO places the strongest focus on higher qualifications in the selection criteria for technology commercialisation staff in comparison to the other two UCOs. This company adopts HR practices such as standardised remuneration (no bonus), arranging whole-company development programs on general topics (such as emotional intelligence), and integrating company values and behaviours with performance appraisal. Besides serving the organisational strategy, these HR practices are also designed to address communication issues that resulted from the organisation’s history and restructuring process. From a wider perspective, it is also possible to argue that contextual contingencies have shaped these HR practices, as financial contraction and shortage of income forced the university to revise its

commercialisation efforts and in turn restructure the UCO to focus more on UCO effectiveness.

UCO Two has an HR strategy that focuses on providing flexibility in order to facilitate its relationship-building model. Breaking down rigidities and encouraging innovations in work approaches can enhance the coordination of exchanges and communication between academia and industry. Practices that reflect this HR strategic focus include a high-involvement decision making process, decentralised HR planning (staff can define their own roles and direct managers create new positions), and the newly introduced real-time virtual network (that allows employees to work anywhere they want). Other HR practices such as staff development are highly individualised, and the company tries to attend to each employee's needs or future career advancement, even if these needs do not have a strong alignment with the company's current strategic objectives.

UCO Three's main HR strategic intention is to develop and enhance staff talent and capacity that are critical to its revenue-generation model. This organisation clearly targets its HR practices at activities that can improve or strengthen employees' job or task-related skills and ability, and has successfully established a culture in which employees take the initiative in their own training and development by nominating activities in which they want to participate. HR practices that reflect the performance-related capacity-building intention include well-integrated talent management process and performance discussion, a performance-based incentive scheme and careful consideration of development opportunities for each employee to decide on what will best suit the job-related needs for each person. UCO Three is also the only organisation of the three that has a performance-based bonus system. As the company is more externally-oriented and focuses on generating revenue, relevant industry experience becomes more important than higher qualifications and it is thus more appropriate to make use of open recruitment channels such as internet advertisement or recruitment agencies for most roles.

Research Question Two: What HR architectures are in place and to what extent do the HR architectures create the intended climate?

HRM approaches and architectures in the three cases show that although a generic model tends to dominate, there are still discernible differences between the three cases. Overall, HRM in the UCOs is most significantly affected by differences in their strategic imperatives, as discussed in the previous section.

The similarities in the three cases' HRM reflect common requirements for UCOs and generic needs of the sector. All three cases acknowledge the need and associated challenges to find candidates who have both an understanding of the academic environment and industry experience (or commercial knowledge). Because the complexity and flexibility of commercialisation roles make it difficult to define specific, rigid skillsets, all three cases base their selection of new staff heavily upon interviews, and new employees usually experience on-the-job training. Furthermore, the diverse range of UCO staff members' roles and projects means it is only meaningful to carry out highly individualised performance appraisal and development needs discussion, which is the practice again observed across all three UCOs (whether or not the outcome of individual development needs discussion actually translates into actual individualised training is another issue). In addition, the nature of commercialisation roles, which often involves domestic and overseas travel or communication and requires accommodation to clients' schedule, makes it necessary for UCOs to provide employees with high work condition flexibility (especially for business development staff). Also, as the UCO is a relatively new type of organisation, it is still creating, developing and experimenting with new roles. This may indicate unlimited potential development and progression opportunities on one hand, but also makes HR planning challenging, on the other. These similarities in the three cases reflect the generic nature and needs of UCOs.

The three cases also have clear differences in the role of their HR function, with the HR function of UCO Two (flexibility-building) having the least strategic presence, UCO Three (capacity-building) operating on a partnership model, and UCO One (conformity-fostering) at this stage being the most centralised and having the most control over HR decision-making. Similar patterns are also observed in their respective staff involvement model, with levels of staff involvement in organisational decision-making being the highest in UCO Two and lowest in UCO One. This pattern can be attributed to the different levels of organisational maturity. The strategic level of UCO One clearly states that once the company completes its restructuring process, it will start transferring more HRM responsibilities from the HR function to direct managers, and thus decentralising HR decision-making. Therefore, one may anticipate that UCO One's HR function will play a role that resembles the HR function for UCO Three as the organisation stabilises and matures. The low level of strategic presence for UCO Two's HR function relates not only to its HR strategy, but also to the organisation's size and developmental stage. As a small

organisation, it is possible to operate on a decentralised model without confusion or inefficiency; at an early stage of development (since the implementation of a completely new strategic model), it is logical that the company adopts a high-involvement model as there are more opportunities for employees to participate in decision-making while procedures are being established or revised. However, both the small organisation size and high-involvement model decrease the relative power of the HR function. Following this rationale, as UCOs One and Three are both about twice the size of UCO Two, have more departments, and are not at an early stage in terms of strategic development, running a high-involvement model similar to UCO Two may be less suitable and may decrease organisational efficiency for UCOs One and Three. In addition, UCO One's geographical spread, and its origins in the merger of two different commercialisation arms, add to the challenge, making it less likely for a high-involvement model to be effective.

Other than these HR variances caused by organisational factors, other differences in HR practices derive from differences in levels of HR sophistication. For example, UCO Three's selection process, which combines phone screening, pre-interview meeting, interviews, psychometric testing and reference checking, represents higher HR maturity (or complexity) for this particular practice than UCO One, which selects new employees only through phone screening, interviews and reference checking. Similarly, UCO Three's HR development opportunities, which include university courses, customised programs, secondment to another role, knowledge-sharing, conferences and events, show greater sophistication in HR development practices than the other two UCOs. Also, although performance appraisal and discussion seem to be less standardised in UCOs One and Two in comparison to UCO Three, both companies are making efforts to ensure that every manager follows the standard schedules and guidelines for this HR practice. It is therefore possible to anticipate more consistency and stability in performance appraisal routines for UCOs One and Two as their HR sophistication level increases.

Research Question Three: How effective are the HR programs and practices in delivering the intended outcomes in the form of employee perceptions and appraisals?

As discussed in section 7.4, each case's HR programs and practices are mapped against the four ideal types of HR architecture presented by Ridder et al. (2012). Although it is possible to clearly associate each UCO with one or two "ideal" HR architectures in particular, this research found no "pure" models of HR architecture. UCO One's characteristics show that it is moving from an administrative to a strategic HR architecture;

UCO Three shows a mixture of strategic HR architecture and value-added HR architecture (e.g. retaining employees through considering their developmental needs); and UCO Two, while resembling the motivational architecture, still has variations that deviate from the “ideal type”.

The results showed that UCO Three is most effective at creating the intended culture, with the highest level of alignment between strategic level’s explanation, middle managers’ description and employees’ experiences of company climate. UCO Three also has the most positive and consistent employee feedback and appraisal of HRM, which can be attributed to the presence of clear and stable HR messages, policies and procedures. On the other hand, both UCOs One and Two are experiencing HR changes and/or revisions currently, yet employee appraisal is more positive for UCO Two (motivational HRM). It is likely that the motivational and high-involvement model increased the transparency of decision-making, visibility of HR changes and employees’ perception of fairness. UCO Two, which is relatively small in size, is also able to implement HR changes more easily and efficiently in comparison to UCO One.

In addition, changes in strategic paradigm for UCO Two have always been clear, thorough, and are marked by distinctive differences. This, to a certain extent, allows staff members to self-select whether they want to stay in the company or leave because they do not approve of the new strategy. In addition, it also allows the company to select who it believes will be able to contribute to the new strategy. UCO Two has experienced two significant shifts in strategy. After the first restructuring, which took place in 2005, only four employees stayed and helped to rebuild the company. Although not as extreme as the first time, a wave of resignation also accompanied the second restructuring process, which took place in 2011. This may have allowed the organisation to implement the new strategy more successfully because employees who choose to stay are often more accepting of the new ideology and are more willing to change with the new strategy. On the other hand, new staff members who join the company during or after restructuring do not have preconceptions that lead to resistance to the new strategy.

Due to the complexity of the commercialisation roles, performance and nature of UCOs, it is not possible to relate employee appraisal to a clear and immediately visible performance outcome. So far, despite clear differences in employee appraisals, all three cases are meeting their strategic objectives and are considered to be performing well according to their own performance indicators. Although it is possible to take the staff turnover figure

as an indicator, many informants acknowledged staff turnover as an unavoidable consequence for those who wish to further progress in their careers. Moreover, some informants suggested that staff turnover can be viewed as a positive phenomenon, as many of the employees who leave the UCO often remain in contact with the organisation and in turn expand the UCO's network. It is not the intention of this research to investigate the relationship between UCO employee exodus and company network-building. However this research identifies this area as a topic for further work.

This research also found a large proportion of UCO staff reporting that taking pride in their jobs and having genuine interests in university research commercialisation are significant work motivators for them. The association between genuine interest and work motivation is stronger than the association between having positive views of the organisation's HR practices and work motivation. While a few informants observed that ineffective HRM has resulted in decreased motivation, there are also a few extreme cases, in which informants who appraised the UCO's HRM negatively still described themselves as being motivated on their jobs because they are passionate about what they are doing and feel that their jobs are benefiting the society. It is possible to conclude that even if the HR architecture does not directly provide the employees with strong motivation, having strong, coherent and clearly aligned HR programs and practices prevents the UCOs from hindering those who are intrinsically motivated and increases the likelihood for employees to identify themselves with the company.

Overall, HR aspects that resemble administrative HR architecture are indeed more likely to result in negative employee appraisal, while HR practices that resemble motivational, strategic and value-add HR configuration are more likely to result in moderate to positive employee appraisal.

8.2. Discussion

HRM in UCOs: Some Common Observations

Based on the conceptual research model, research results identified organisational history and availability of resources as important moderators that determine the translation of UCO strategy into HR strategic intention, as well as the translation of HR strategic intention into actual implemented HR programs and practices. As university commercialisation only started receiving more attention in the 1980s, UCOs may

experience “trial-and-error” processes and multiple changes before the university finally finds the model that can best meet its commercialisation needs (which may again change with time and contexts). The relative novelty of this particular type of specialised organisation means that there are no clear models and paths proven to be both successful and sustainable for the UCOs to simply select (based on their own contexts) and follow. This makes it challenging for UCOs to grow with stability, and unstable organisational history in turn hinders a UCO’s ability to maintain coherent HR intentions and develop and implement effective HR architectures. Even in the case of UCO Three, which has grown stably over the past two decades, it is still difficult to predict the future sustainability of its revenue-generation model due to environmental contingencies and shifting market trends. Organisational history also affects the formulation of HR intentions, because in addition to serving the organisational strategy, the HR objectives may also target organisational issues that result from historical instability. On the other hand, as UCOs return all of their revenue to the university and can only rely on the budget provided by the university, financial resources available to these organisations are significantly limited, and HR only receives a certain proportion of the budget. This means that UCOs’ HR effectiveness is not only influenced by the availability of financial resources, but also the extent to which the UCO is able to identify and leverage relevant opportunities.

Future of UCO strategies

It is likely that the strategies for all three cases will follow a converging trend in the future. UCO One, which has traditionally been heavily service-based and internally-oriented, recently identified the need to generate more income in order to assist with university finances. Considering this university’s culture and this UCO’s organisational history, it will be unlikely for it to experience extreme paradigm shifts; therefore, it is reasonable to expect UCO One to start making incremental changes that shift its strategy towards a better balance between service and revenue.

UCO Two bases its strategy on considerations including the reason of existence, nature and purpose of UCOs, the respective needs of academics and industry partners, and formulates clear short-term, mid-term and long-term objectives accordingly. Having recently implemented a brand new strategy that incorporates all important elements of university commercialisation, UCO Two should be able to develop and grow stably from here on. This research therefore predicts that UCO Two’s current strategy may be the most sustainable of the three cases.

Although UCO Three has enjoyed over two decades of stable growth with its revenue-based strategy, the consequences of economic downturn, changes in government funding policies and the lack of domestic absorptive capacity are starting to emerge and it is becoming increasingly challenging for UCO Three to meet its revenue growth targets. In response to these issues, UCO Three is currently trying to further develop international markets and build its global presence. However, as many other regions are also facing the outcomes of the global financial recession, it is overly optimistic to expect international business development to solve the problem. If this UCO is no longer able to provide the financial incentives that are currently motivating some academics to participate in commercialisation activities, it will lose at least some academic interest and input. In such circumstances, there is a likelihood that this UCO (and the university) will readjust its strategic focus and try to encourage more academic engagement in commercialisation activities, perhaps for reasons other than financial incentives. Therefore, there is some possibility that the three UCOS' strategies will follow a converging trend towards a balanced model.

Future of HRM in UCOS

As mentioned earlier, although HRM comprises different strategic imperatives in the three cases, each UCO acknowledges the creation of a collegial and positive workplace as one of their HR objectives. Based on this observation, this research again considers the possibility that future internal pressures will drive the three UCOS' HR practices towards convergence.

As all three cases' HR strategic objectives are set to serve organisational strategy, changes in organisational strategy will also shift HR objectives. However, another important determinant of HR objective is organisational development. As UCOS develop and mature, it is likely that their HR goals will become increasingly similar. For example, although UCO One is currently aiming to foster conformity partly to address organisational issues that stem from recent restructuring, once the company solves this issue and successfully builds a stronger organisational identity, the company may then choose to start focusing more on staff development and capacity building. As staff development is the HR area receiving the lowest level of positive employee appraisal at this moment, it seems necessary for UCO One to place more emphasis on this area if it wants to create and maintain a positive workplace. This will also become increasingly relevant when UCO One starts shifting its strategic goal towards revenue generation as discussed previously. In

this sense, it is possible to predict that UCO One's HR objective will become increasingly similar to UCO Three's current HR goals.

In comparison to UCOs One and Three, UCO Two is different in terms of its organisational size, structure, strategy and thus HR model. Its high-involvement model is special because it allows all employees to become involved in strategic decision making. Nonetheless, as the company progresses out of its initial development stage and moves into the growth phase, there will be fewer opportunities and less need for employees to become involved in strategic discussions or make changes. Without suitable platforms for the high-involvement model (at an organisational level), UCO Two's HR strategic goal of flexibility may also start becoming less different from the other two cases. With a small organisation size and flat organisational structure, UCO Two should be able to maintain its advantages of efficiency in communication via the matrix structure and HRM implementation. However, if the number of projects and work volume grows for this UCO, it may become necessary for this organisation to increase in size, or add more levels to its organisation structure. If this happens, it will be likely that UCO Two's HRM will also take a path similar to that adopted by UCO Three.

As the HRM of UCO Three is already relatively mature, sophisticated and stable, it is less likely that UCO Three will make radical or significant changes in its HR goals. Minor adjustments, such as closing the loop for staff selection methods and enhancing cross-functional communication, may be made to enhance current processes and practices. Therefore, this research suggests that all three UCOs will maintain or shift more or less towards a capacity-building focus with the creation of a positive workplace as an overarching goal at all times.

All three cases will continue to place the creation of a positive workplace as an overarching HR goal for two key reasons. First, the nature of UCO roles makes it extremely important for these organisations to ensure that the staff members can maintain high performance when working independently and autonomously. Because it is difficult to micromanage these employees, UCOs need to make sure their staff members are happy and are working smoothly. Second, due to the complex nature of these roles, collegial support and knowledge exchange are crucial to the success of research commercialisation, yet such support and exchange are hard to regulate and are more effective when they happen organically. Therefore, having a collegial and positive workplace will always be a key focus of UCOs, regardless of their shifts in strategic goals.

At the HR programs level, some HR practices within the HR system will also become more similar, while others may remain different depending on the organisational strategy and leadership preference, or they may remain different because variations in these practices do not have much strategic importance. For example, if UCO One maintains a strong university-focus, it is unlikely that it will change its recruitment and selection process because it needs staff members who can serve academics and their needs. However, if the company and the university are forced to shift more towards revenue generation, then there may be adjustments made to identify people who are not necessarily highly qualified, but have more industry experience. This will in turn lower the proportion of UCO staff recruited via word-of-mouth and increase the proportion identified via direct advertisements or head-hunters.

In terms of staff development, it is possible that UCOs One and Two will start adopting training channels and opportunities that are similar to those available in UCO Three. Given that UCO One and UCO Two are completing their restructuring process, the next logical step is to start enhancing staff capacity and developing staff talents - perhaps in the form of more networking and knowledge sharing rather than training courses or programs. The only distinct difference between the three cases' performance appraisal and rewards practices is performance-based incentives. At this stage, UCO Three is the only organisation that has a bonus system. Again, due to challenges with quantifying and measuring UCO staff efforts and work outcomes, there are arguments both for and against the bonus system, making it difficult to predict whether UCOs One and Two are likely to adopt such an incentive in the future.

This research also anticipates that the UCOs' HR function will converge to play more of a coordinator and advisory role. As a general trend, as organisation size increases, HR functional importance will also increase. UCO Three is already operating on an advisory (partnership) model in which the HR function supports line managers with making staff-related managerial decisions, but it does not make these decisions on behalf of the managers. These decisions range from managing misbehaviour, initiating recruitment processes, deciding and creating the ideal team culture, to staff development activities. UCO One, as mentioned earlier, is already aiming to shift more HR responsibilities from the HR function to direct managers. Once it achieves more organisational consensus and collective identity, it will become possible for line managers to have greater freedom with

the HRM of their own teams, and hence UCO One's HR function is also headed towards an advisory model.

In comparison to UCOs One and Three, UCO Two's HR function has the least strategic presence and currently displays little clear direction. However, the converging trend will also be applicable if UCO Two increases in size or changes its structure (which may be unavoidable if it performs well). Having a central HR vision and function that coordinates all HR activities across the organisation will become increasingly important as the company grows. In addition, while it is still possible to operate a high-involvement model at the departmental or team level and facilitate bottom-up communication flow, it will become difficult to maintain such a model at the organisational level as the company size increases. In such circumstances, it will be necessary for the company to develop a HR function that ensures consistency, equity and company-wide communication, while also supporting each department or team. Therefore, the value-based HRM architecture may become the most effective and appropriate HR model for the UCOs to implement and maintain if they plan to grow and develop sustainably.

8.3. Contribution and Limitations

Contributions

Theoretical contribution

This research joins the academic conversation around the issue of HR-organisational performance links. This research provides insight into how firms link their HR system to company strategy, how such a system creates a climate that encourages the achievement of desirable organisational goals, and how employees appraise such an HR system shaped by principal actors. It furthers the understanding of the ways in which HR creates value for the firm. On the other hand, while existing research in this area focused on standardised service environments (e.g. hospitals and cinemas), this research's selection of the university commercialisation setting addresses an environment that is at once service-oriented yet at the same time less standardised and more professional. This research identified characteristics in the means and processes that are specific to this particular context by which HRM helps to generate the desired organisational climate and employee outcomes.

This research also extends the field of HRM by empirically testing the association between HR program configurations and employee appraisal. The empirical findings suggest that rather than displaying characteristics of one pure HR architecture “ideal type”, each UCO’s HRM configuration can contain characteristics of more than one HR architecture, especially during transitional phases. HR characteristics that resemble the administrative architecture are more likely to receive negative employee appraisal, whereas HR characteristics that reflect other architectures tend to receive more positive employee appraisal. However, these architectures are not stagnant and UCOs may shift in different HR architectural directions depending on organisational and contextual changes. Regardless of differences in their HRM and what strategies they adopt, as UCOs develop and become more mature, the generic organisational needs and pressure will move them towards the value-based HRM architecture.

In addition, this research empirically tested and extended Ridder et al.’s (2012) conceptual HR architecture framework. While Ridder et al. (2012) present the HR architectures as stable “ideal types” that map different models of HRM configurations within non-profit organisations, this research extended this framework’s application to the UCO setting and noted the dynamic nature of HR practices and employee perceptions within organisations. Rather than displaying characteristics of one particular ideal type, the HRM configurations of every UCO examined in this thesis display characteristics that correspond to more than one ideal type. Such mixture can reflect different phases of organisational development and transition, different employee groups’ HR experience, or different line managers’ approaches to HRM. This illustrates the complexity and fluidity of HRM in real-life contexts. Also, without clear organisational strategic imperatives on the HR direction, the blending process of HR messages and practices in organisations may, in reality, remain a series of ad-hoc muddling through that are not directed towards a clear objective.

Method

This research presents a qualitative, interpretive study that incorporates contextual factors when examining the implications of HRM in a special setting. This research made direct contact with organisations and conducted qualitative research in order to examine how organisations link their HR systems to organisational strategies, which is not a common research approach in the field of HRM research currently. Qualitative data has provided deeper insight into the HR patterns and processes, which in turn facilitated the building of models and typologies.

Policy and Practices

This research has practical implications for university research commercialisation, as it identifies different models of university commercialisation strategy and important HR practices that can enhance employee perceptions. It also recognises a number of factors that have significant influences on UCO strategy and their effectiveness, regardless of the commercialisation strategy. As previously mentioned, university commercialisation activities are growing, the role of UCOs is still evolving and the size and number of these organisations are developing. Therefore, it is reasonable to predict that HRM in these organisations will become increasingly important in the near future. The findings of this research can advise these organisations (and their universities) on both effective and ineffective practices and provide insight into the management practices of other similar entities. The enhancement of HRM and commercialisation performance can in turn strengthen the linkages and relationship between academia and industry. As both New Zealand and Australia are under-performing in areas of innovation and technology transfer in comparison to other developed countries, this research contributes to the investigation and promotion of means that will enhance the effectiveness of commercialisation activities.

UCOs are special in the sense that their survival depends on the existence of the university, and most of the main stream universities will strive to establish and maintain a research commercialisation entity. This means that UCOs have more freedom to pursue objectives and ends beyond financial goals. The three cases examined by this research show that while these UCOs are the same type of organisation established by similar universities, they can still pursue very different outcomes. The budget provided by the university guarantees UCO survival. Therefore, failures in organisational model or HRM are less likely to lead to immediate and detrimental outcomes. However, what seems to be an advantage can also become a disadvantage. As UCO survival depends on the university, any changes in the university regulation will also affect the functioning of the UCO. This also indicates that the power of the university is greater than the UCO's own strategic actions, and thus UCOs often cannot make strategic decisions entirely independently. Even the most financially successful UCO cannot make investments without budget constraints, as UCOs return all revenue to the university. Therefore it is extremely crucial for UCOs to ensure that all its practices, including and perhaps especially HRM, are effective and efficient, as they cannot afford to waste any resources and investments.

In order to enhance university commercialisation performance, both international university ranking systems and domestic governmental evaluation of tertiary institutions may need to take into account the range of commercialisation activities. While motivators such as financial incentives and personal interest or passion can be effective, these remain at an individual level, and greater scales of university commercialisation activities can only be achieved when they become part of the formal assessment criteria. In addition, most commercialisation efforts to date have focused on areas such as science, medicine and engineering, yet there is still great potential to further develop research commercialisation opportunities in other non-science and non-engineering areas. Universities and governments may consider formulating strategies that can encourage more commercialisation activities in faculties or departments such as public policy, arts, creative arts and business and economics.

Research Limitations

Due to time and resource constraints, one limitation of this research is the informant invitation method. As UCOs One and Two are located overseas, it was more economical to arrange as many interviews as possible in the shortest period of time. Therefore the second-level gatekeepers, who have direct access to all managers' and employees' schedules, arranged all interviews for the first two cases. In contrast, as UCO Three is located in New Zealand, there is more flexibility with interview scheduling. Therefore the researcher emailed interview invitations to the participants directly. As a result, the interview rejection rate was much higher for UCO Three than UCOs One and Two. 7% and 5% of those invited declined to take part in the research for UCO One and UCO Two respectively, while 54% declined (or did not respond to) the interview invitation for UCO Three.

Differences in the informant invitation and rejection rates may have led to more positive comments and appraisal being obtained from UCO Three. This is because informants who responded to the researcher's initial expression-of-interest emails and made extra efforts to arrange interview location and time with the researcher are more likely to be those who are happier with the organisation, more willing to take part in research interviews, or have more understanding of the organisation's HRM (and are thus more interested in the research project).

However, the triangulation method mitigated the influence of this limitation on the research results. Informants' description and appraisal of HRM and other organisational aspects were supported by explanation of details and examples, and comparisons were made between different informants' response to the same events or practices. This increased the coherency of stories and allowed better understanding of why different informants may have different explanations for the same HR area. Therefore, while there are levels of subjectivity in every individual's experience of organisational practices, the data collected from interviews are accounts supported by other evidence.

8.4. Future Research

Based on the UCO strategic dimensions and HRM models identified by this research, future research in this area might further investigate linkages between HRM and organisational outcomes by comparing how different HR strategies (and the corresponding HR systems) affect the performance of UCOs that adopt similar commercialisation strategies. This can allow the discovery of some best practices which can be applied across UCOs following a particular strategic model, and it can also contribute to the understanding of HRM outcomes at the organisational level.

Future research might also test the behavioural outcome of employee appraisals in more detail. For example, it is possible to look at whether there are direct associations between employee appraisals of HRM and their job performance. This will further testify the relevance and importance of HRM to UCO performance.

Another area for further work is the investigation of how UCO employee exodus affects organisational networks. Although UCO staff turnover affects these organisations' ability to establish long-term relationships with firms and entrepreneurs, informants of this research have also suggested that employees who leave the company can in fact expand the UCO's network.

Finally, future studies may also investigate emerging UCO models. As this particular type of organisation is still evolving in response to changing contexts and shifting needs of both the industry and university, it will be meaningful to explore different aspects of emerging UCO models, including commercialisation strategies or ideologies, organisational structure, performance indicator, governance and management approach, and specialisation of services.

APPENDIX I: INTERVIEW QUESTIONS

CEO/ Members of the board

1. When did you start off on this position? How did [name of UCO] find/ recruit you?
2. What is the level of board involvement in the organisational strategy and formulation process?
3. What are the organisation's objectives, values and mission?
4. What is this UCO's organisation history?
5. What are the key organisational activities (including main revenue streams, types of contract)? Is this company making profit? Are there any reports available?
6. Are the company objectives met? How is performance measured? Does this company compare itself with other UCOs?
7. What is the company management structure? Are there executive team meetings? What sorts of issues are usually discussed (does it include discussion of HR issues)? Do you meet with individual staff members?
8. How is the HR strategy formulated? How are the objectives and goals of the HR function decided?
9. Vision of HR function. What is the role of the HR function in organisation strategy? Is there briefing with the board of directors on HR? How often? What HR topics are discussed at the briefing?
10. General HR situation: Any organisational challenges with:
 - a. Attraction and retention?
 - b. Learning and development?
 - c. Performance reviews?
 - d. Remuneration and incentives

General Managers (including HR Executive/ Manager)

1. What is the company's current HR strategy?
 - a. When was it formulated? How was it formulated? Which situational factors have influence on this strategy?
 - b. Who has the most influence on this strategy?
2. Is there briefing with the board on HR? Is HR part of the company's strategic planning? What sorts of issues are included in the briefing?
3. What do you expect the HR function to deliver?
 - a. What are the main things that [this UCO/ you] want to achieve through HR?
 - i. Culture or climate to create?
 - ii. Employee performance/ behaviour to reinforce?
 - b. How does it work? How does the system go about achieving these?
4. Has the HR system been successful so far? Has it delivered ideal outcomes? How do you know?
 - a. Turnover rate? Retaining good performer?
 - b. Employees reaching their potential?
 - c. Employee feedback? Commitment/ satisfaction?
5. How long have you been working here? Previous background? How did this company find/ recruit you? Did you start off (in this UCO) on your current role?
6. Have you been through any position changes? How did the position shift take place?
7. HR practices
 - a. Knowledge, skills and ability: Recruitment and selection- How? Is there a preferred channel (agency/ word-of-mouth/ other)? Who is in charge? Are line managers involved? Are there particular challenges?

Training and development- How? What activities are involved? How does the decision-making process work? Are there particular challenges?
 - b. Motivation: Performance management system- do employees have individual and/or team objectives? What sorts of measurements are used?

How does remuneration and incentives work? Is there acknowledgement of top performers? How?
 - c. Opportunities: How are jobs designed?

What are this UCO's communication mechanisms (Are there formal meetings? Who attends the meetings? How often are these held? What is discussed?)

How does decision making work in this UCO?

What are the internal career progression opportunities like?

Line Managers

1. How long have you been working for [name of UCO]? On this position? As a line manager? What is your personal background (previous work experience and qualifications)?
2. How did this company recruit/ find you? Have you been through any position changes? How did the position shift take place?
3. What are your main roles and tasks for this position? What are the managerial responsibilities? What is your involvement in:
 - a. Your team members' recruitment, selection, training and development?
 - b. Ensuring team members' motivation through performance management, incentives and remuneration?
 - c. Providing team members with opportunities to contribute through job design, voice mechanism? How often do you have formal meeting? Do you communicate with them on a daily basis?
 - d. Do you communicate with the HR team often? For what sorts of issues?
 - e. What climate do you try to create within your team?
 - f. What are some outcomes of HRM in your team? Team members' reaction? Are they meeting their KPIs? Reaching potential? Committed? Satisfied?
4. Your own HR experience in areas including:
 - a. Recruitment and selection
 - b. Training and development
 - c. Overall, how do you feel about the company's attempts to ensure that you have the required skills and ability for your job?
 - d. Remuneration and incentives? Performance management process?
 - e. What do you think are the main factors that motivate you on your job?
 - f. How is communication between you and your manager? Is there a formal procedure to express opinion? How is your job designed? Who decides your work condition?
 - g. Overall, how do you feel about your say in your job design? Are there appropriate opportunities to contribute and perform?
5. Through the current HR policies and practices, what do you think the strategic level/ senior management team is trying to achieve?
 - a. What are the key values/ culture/ climate that they intend to create?
 - b. What behaviours are encouraged?

Individual Employees

1. How long have you been working for [name of UCO]? On this position? What is your personal background (previous work experience and qualifications)?
2. How did this company recruit/ find you? Recruitment and selection process? Have you been through any position changes? How did the position shift take place?
3. What are your main tasks and roles for this position? What are your daily tasks and jobs?
 - a. Have you received induction and training when you first joined? Have you been receiving continuous development programs? What types and how?
 - b. Overall, how do you feel about the company's attempts to ensure that you have the required skills and ability for your job?
4. Performance appraisal process: How does it work? When does it take place?
 - a. Is this tied to other activities? E.g. remuneration and incentives? Career progression opportunities?
 - b. How do you feel about the company's attempts to ensure that you are motivated? What do you think are the main factors that motivate you on your job?
5. How often do you communicate with your manager? With the strategic team? Is there a formal procedure to express opinion? How often do you have regular formal meetings (individually with direct manager/ team meetings)?
 - a. Overall, how do you feel about your say in your job design? Are there appropriate opportunities to contribute and perform?
6. Through the current HR policies and practices, what do you think the strategic level/ senior management team is trying to achieve?
 - a. What are the key values/ culture/ climate that they intend to emphasise or create?
 - b. What behaviours are encouraged?

REFERENCES

- Amaratunga, D., & Baldry, D. (2001). Case study methodology as a means of theory building: performance measurement in facilities management organisations. *Work Study*, 50(3), 95-105.
- Anderson, G. C. (1993). *Managing Performance Appraisal Systems*. Oxford: Blackwell Business.
- Armstrong, M., & Murlis, H. (2004). *Reward Management: A Handbook of Remuneration Strategy and Practice*. London: Kogan Page.
- Arthur, J. B., & Boyles, T. (2007). Validating the human resource system structure: A levels-based strategic HRM approach. *Human Resource Management Review*, 17(1), 77-92.
- Australian Centre for Innovation, Howard Partners & Carisgold. (2002). Best Practice Processes for University Research Commercialisation: Report published by Commonwealth of Australia, Department of Education, Science and Training.
- Aycan, Z. (2005). The interplay between cultural and institutional/structural contingencies in human resource management practices. *The International Journal of Human Resource Management*, 16(7), 1083-1119.
- Baird, L., & Meshoulam, I. (1988). Managing two fits of strategic human resource management. *Academy of Management Review*, 13(1), 116-128.
- Barlow, T. (2006). *The Australian Miracle: An Innovative Nation Revisited*. . Australia: Pan Macmillan Australia Pty Limited.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Barney, J. B., & Wright, P. M. (1997). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *CAHRS Working Paper Series No.150*.
- Bartram, T., Stanton, P., Leggat, S., Casimir, G., & Fraser, B. (2007). Lost in translation: Exploring the link between HRM and performance in healthcare. *Human Resource Management Journal*, 17(1), 21-41.

- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), 779-801.
- Beer, M., Spector, B., Lawrence, P., Quinn Mills, D., & Walton, R. (1984). *Managing Human Assets*. New York: Free Press.
- Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative Research for Education : An Introduction to Theory and Methods* (4th ed.). New York: Pearson.
- Bouma, G. D. (2000). *The Research Process* (4th ed.). Oxford: Oxford University Press.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the " strength" of the HRM system. *The Academy of Management Review*, 29(2), 203-221.
- Boxall, P. (2003). HR strategy and competitive advantage in the service sector. *Human Resource Management Journal*, 13(3), 5-20.
- Boxall, P., Ang, S. H., & Bartram, T. (2011). Analysing the 'black box' of HRM: uncovering HR goals, mediators, and outcomes in a standardized service environment. *Journal of Management Studies*, 48(7), 1504-1532.
- Boxall, P., & Purcell, J. (2000). Strategic human resource management: where have we come from and where should we be going? *International Journal of Management Reviews*, 2(2), 183-203.
- Boxall, P., & Purcell, J. (2011). *Strategy and Human Resource Management* (3rd ed.). London: Palgrave Macmillan.
- Boxall, P., Purcell, J., & Wright, P. (2008). Human resource management. In P. Wright, J. Purcell & P. Boxall (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 1-16). New York: Oxford University Press.

- Chapple, W., Lockett, A., Siegel, D., & Wright, M. (2005). Assessing the relative performance of U.K. University technology transfer offices: parametric and non-parametric evidence. *Research Policy*, 34(3), 369–384.
- Clark, B. R. (1998). *Creating Entrepreneurial Universities: Organizational Pathways of Transformation* United Kingdom: Elsevier Science Ltd.
- Clarysse, B., Wright, M., Lockett, A., Van de Velde, E., & Vohora, A. (2005). Spinning out new ventures: a typology of incubation strategies from European research institutions. *Journal of Business Venturing*, 20(2), 183–216.
- Colbert, B. A. (2004). The complex resource-based view: Implications for theory and practice in strategic human resource management. *The Academy of Management Review*, 29(3), 341-358.
- Collier, A. (2008). *Enhancing Australian Universities' Research Commercialisation Performance*. Doctor of Philosophy, Royal Melbourne Institute of Technology University, Melbourne.
- Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3), 544-560.
- Collis, J., & Hussey, R. (2003). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. New York: Palgrave Macmillan.
- Collis, J., & Hussey, R. (2009). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. New York: Palgrave Macmillan.
- Compton, R., Morrissey, W., & Nankervis, A. (2006). *Effective Recruitment & Selection Practices*. Australia: CCH Australia Limited.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd ed.). London: SAGE Publications.
- Cutler Report. (2008). *Venturous Australia: Review of the National Innovation System*. Australia: Cutler & Company Pty Ltd.

- Daniels, J. D., & Cannice, M. V. (2004). Interview studies in international business research. In R. Marschan-Piekkari & C. Welch (Eds.), *Handbook of Qualitative Research Methods for International Business* (pp. 185-206). Cheltenham, UK: Edward Elgar Pub.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949-969.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802-835.
- Denman, B. D. (2005). What is a University in the 21st Century? *Journal of the Programme of Institutional Management in Higher Education*, 17(2), 9-28.
- DEST. (2005). *Metrics for Research Commercialisation: A Report to the Coordination Committee on Science and Technology*. Australia: Department of Education, Science and Training.
- Doorewaard, H., & Meihuizen, H. E. (2000). Strategic performance options in professional service organisations. *Human Resource Management Journal*, 10(2), 39-57.
- Dorf, R. C., & Worthington, K. K. F. (1990). Technology transfer from universities and research laboratories. *Technological Forecasting and Social Change*, 37(3), 251-266.
- Dyer, L. (1984). Studying human resource strategy: An approach and an agenda. *Industrial Relations: A Journal of Economy and Society*, 23(2), 156-169.
- Dyer, L., & Reeves, T. (1995). Human resource strategies and firm performance: What do we know and where do we need to go? *International Journal of Human Resource Management*, 6(3), 656-670.
- Easterby-Smith, M., Thorpe, R., & Jackson, P. (2008). *Management Research* (3rd ed.). London: SAGE Publications Limited.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (2002). *Management Research: An Introduction* (2nd ed.). London: SAGE Publications Limited.

- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Engelbrecht, H., & Darrogh, J. (1999). A comparative macro-level assessment of New Zealand's "national innovation system". *Prometheus*, 17(3), 283-298.
- Eriksson, P., & Kovalainen, A. (2008). *Qualitative Methods in Business Research*. London: Sage Publications Ltd.
- Etzkowitz, H. (2003). Research groups as 'quasi-firms': the invention of the entrepreneurial university. *Research Policy*, 32(1), 109-121.
- Fairweather, J. R., Wintjes, R., Williams, J., Rinne, T., & Nauwelaers, C. (2010). Comparison of innovation policies in selected European, Asian and Pacific Rim countries: how best to optimise innovation governance in New Zealand? *The Agribusiness and Economics Research Unit Research Report No. 321*. Christchurch: The Agribusiness and Economics Research Unit.
- Friedman, J., & Silberman, J. (2003). University technology transfer: do incentives, management and location matter? *Journal of Technology Transfer*, 28, 17-30.
- George, A. L., & Bennett, A. (2005). *Case Studies and Theory Development in the Social Sciences*. Cambridge, Massachusetts: MIT Press.
- Geuna, A., & Muscio, A. (2009). The governance of university knowledge transfer: A critical review of the literature. *Minerva*, 47(1), 93-114.
- Ghuri, P. (2004). Designing and conducting case studies in international business research. In R. Marschan-Piekkari & C. Welch (Eds.), *Handbook of Qualitative Research Methods for International Business* (pp. 109-124). Cheltenham, UK: Edward Elgar Pub.
- Goldstein, I. L. (1993). *Training in Organizations: Needs Assessment, Development, and Evaluation*. California: Thomson Brooks/Cole Publishing Co.

- Gooderham, P. N., Nordhaug, O., & Ringdal, K. (1999). Institutional and rational determinants of organizational practices: human resource management in European firms. *Administrative Science Quarterly*, 44(3), 507-531.
- Grant, D. (1999). HRM, rhetoric and the psychological contract: a case of 'easier said than done'. *International Journal of Human Resource Management*, 10(2), 327-350.
- Gray, S. R., & Benson, P. G. (2003). Determinants of executive compensation in small business development centers. *Nonprofit Management & Leadership*, 13, 213–227.
- Green, F. (2008). Leeway for the loyal: A model of employee discretion. *British Journal of Industrial Relations*, 46(1), 1-32.
- Guest, D. E. (1997). Human resource management and performance: A review and research agenda. *International Journal of Human Resource Management*, 8, 263–276.
- Gunasekara, C. (2006). Reframing the role of universities in the development of regional innovation systems. *Journal of Technology Transfer*, 31, 101-113.
- Guthrie, J. P. (2008). Remuneration: pay effects at work. In P. Wright, J. Purcell & P. Boxall (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 344-363). New York: Oxford University Press.
- Harloe, M., & Perry, B. (2004). Universities, localities and regional development: the emergence of the 'mode 2' university? *International Journal of Urban and Regional Research*, 28(1), 212-223.
- Harman, G., & Harman, K. (2004). Governments and universities as the main drivers of enhanced Australian university research commercialisation capability. *Journal of Higher Education Policy and Management*, 26(2), 153-169.
- Henderson, R. (1980). *Performance Appraisal: Theory to Practice*. Virginia: Reston Publishing Company, Inc.
- Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75-89.

- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40(1), 171-188.
- Ibbetson, J., & Whitmore, D. A. (1977). *The Management of Motivation and Remuneration*. London: Business Books.
- Jackson, S. E., & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. *Annual Review of Psychology*, 46, 237-264.
- Jensen, R. A., Thursby, J. G., & Thursby, M., C. (2003). The disclosure and licensing of university inventions: "the best we can do with the s**t we get to work with". *International Journal of Industrial Organization*, 21(9), 1271-1300.
- Jiang, K., Kim, M. S., Han, K., Lepak, D. P., Hong, Y., Kim, A., & Winkler, A. L. (2009). Understanding human resource systems: conceptualizing how the parts work together. *Academy of Management Annual Meeting Proceedings*.
- Jiang, K., Lepak, D. P., Han, K., Hong, Y., Kim, A., & Winkler, A. L. (2012). Clarifying the construct of human resource systems: relating human resource management to employee performance. *Human Resource Management Review*, 22, 73-85.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.
- Kalleberg, A. L., Marsden, P. V., Reynolds, J., & Knoke, D. (2006). Beyond profit? Sectoral differences in high-performance work practices. *Work and Occupations*, 33(3), 271-302.
- Keats, D. M. (2000). *Interviewing: A Practical Guide for Students and Professionals*. Sydney: UNSW Press.
- Kehoe, R. R., & Collins, C. J. (2008). Exploration and exploitation business strategies and the contingent fit of alternative HR systems. In J. J. Martocchio (Ed.), *Research in*

- Personnel and Human Resources Management* (Vol. 27, pp. 149-176): Emerald Group Publishing Limited.
- Kepes, S., & Delery, J. E. (2008). HRM systems and the problem of internal fit. In P. Wright, J. Purcell & P. Boxall (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 385-404). New York: Oxford University Press.
- Khilji, S. E., & Wang, X. (2006). 'Intended' and 'implemented' HRM: The missing linchpin in strategic human resource management research. *International Journal of Human Resource Management*, 17(7), 1171-1189.
- King, N., & Horrocks, C. (2010). *Interviews in Qualitative Research*. London: SAGE Publications Limited.
- Knowledge Commercialisation Australasia. (n.d.). *Home*. Retrieved 27 Jan 2012, from www.kca.asn.au
- Kogut, B., & Zander, U. (1996). What firms do? Coordination, identity, and learning. *Organization Science*, 7(5), 502-518.
- Kvale, S. (1996). *InterViews: An Introduction to Qualitative Research Interviewing*. California: Sage Publications, Inc.
- Lee, S. S., & Osteryoung, J. S. (2004). A comparison of critical success factors for effective operations of university business incubators in the United States and Korea. *Journal of Small Business Management*, 42(4), 418-426.
- Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., & Drake, B. (2009). Strategic human resource management: The evolution of the field. *Human Resource Management Review*, 19(2), 64-85.
- Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A conceptual review of human resource management systems in strategic human resource management research. *Research in Personnel and Human Resources Management*, 25(1), 217-271.
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24(1), 31-48.

- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of management*, 28(4), 517-543.
- Lepak, D. P., Takeuchi, R., & Snell, S. A. (2003). Employment flexibility and firm performance: Examining the interaction effects of employment mode, environmental dynamism, and technological intensity. *Journal of Management*, 29(5), 681-703.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: SAGE Publications, Incorporated.
- Lindelof, P., & Lofsten, H. (2003). Science park location and new technology-based firms in Sweden - implications for strategy and performance. *Small Business Economics*, 20(3), 245–258.
- Lindgreen, A., & Beverland, M. (2009). *Research Quality in Qualitative Case Studies*: Hull University Business School.
- Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2000). *Proposals That Work: A Guide for Planning Dissertations and Grant Proposals* (4th ed.). California: SAGE Publications, Incorporated.
- MacDuffie, J. P. (1995). Human resource bundles on manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48(2), 197-221.
- Markman, G. D., Gianiodis, P. T., Phan, P. H., & Balkin, D. B. (2004). Entrepreneurship from the Ivory tower: do incentive systems matter? *The Journal of Technology Transfer*, 29(3), 353-364.
- Markman, G. D., Gianiodis, P. T., Phan, P. H., & Balkin, D. B. (2005). Innovation speed: transferring university technology to market. *Research Policy*, 34(7), 1058–1075.
- Marshall, C., & Rossman, G. B. (2006). *Designing Qualitative Research* (4th ed.). California: Sage Publications, Incorporated.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-525.

- Martin, B. R., & Johnston, R. (1999). Technology foresight for wiring up the national innovation system: experiences in Britain, Australia, and New Zealand. *Technological Forecasting and Social Change*, 60(1), 37-54.
- Merriam, S. B. (1988). *Case Study Research in Education. A Qualitative Approach*. San Francisco: Jossey-Bass Inc., Publishers.
- Merriam, S. B. (2002). *Qualitative Research in Practice: Examples for Discussion and Analysis*. San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). California: Sage Publications, Incorporated.
- Morse, J. M., & Richards, L. (2002). *Readme First for a User's Guide to Qualitative Research*. California: Thousand Oaks, CA: Sage.
- Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee attributions of the “why” of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61(3), 503-545.
- O'Shea, R. P., Allen, T. J., Chevalier, A., & Roche, F. (2005). Entrepreneurial orientation, technology transfer and spinoff performance of US universities. *Research Policy*, 34(7), 994-1009.
- OECD. (2007). New Zealand. *Organisation for Economic Co-operation and Development Reviews of Innovation Policy*.
- OECD. (2011). Gross Domestic Expenditure on R&D as a Percentage of GDP. from Organisation for Economic Cooperation and Development http://www.oecd-ilibrary.org/science-and-technology/gross-domestic-expenditure-on-r-d_2075843x-table1
- Orlitzky, M. (2008). Recruitment strategy. In P. Wright, J. Purcell & P. Boxall (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 273-299). New York: Oxford University Press.
- Osterman, P. (1987). Choice of employment systems in internal labor markets. *Industrial Relations: A Journal of Economy and Society*, 26(1), 46-67.

- Paauwe, J. (2009). HRM and performance: Achievements, methodological issues and prospects. *Journal of Management Studies*, 46(1), 129-142.
- Paauwe, J., & Boselie, P. (2003). Challenging 'strategic HRM' and the relevance of the institutional setting. *Human Resource Management Journal*, 13(3), 56-70.
- Parham, D., & Roberts, P. (2004). Productivity growth and its sources: how do NZ and Australia compare? *Productivity: Performance, Prospects and Policies*. Wellington: The Treasury, Reserve Bank of New Zealand, Ministry of Economic Development.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). California: SAGE Publications, Inc.
- Phan, P. H., & Siegel, D. S. (2006). *The Effectiveness of University Technology Transfer*. Hanover, MA: Now Publishers Inc. .
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method*. London: Sage Publications Limited.
- Ridder, H.-G., Baluch, A. M., & Piening, E. P. (2012). The whole is more than the sum of its parts? How HRM is configured in nonprofit organizations and why it matters. *Human Resource Management Review*, 22, 1-14.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers* (2nd ed.). Oxford: Blackwell.
- Rothaermel, F. T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: a taxonomy of the literature. *Industrial and Corporate Change*, 16(4), 691-791.
- Rowley, J. (2002). Using case studies in research. *Management Research News*, 25(1), 16-27.
- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health*, 18(2), 179-183.
- Searle, R. H. (2003). *Selection and Recruitment: A Critical Text*. United Kingdom: Palgrave Macmillan.

- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research. *Political Research Quarterly*, 61(2), 294-308.
- Sheehan, C., Cooper, B., Holland, P., & De Cieri, H. (2007). The relationship between HRM avenues of political influence and perceived organizational performance. *Human Resource Management*, 46(4), 611-629.
- Siegel, D. S., Veugelers, R., & Wright, M. (2007). Technology transfer offices and commercialization of university intellectual property: performance and policy implications. *Oxford Review of Economic Policy*, 23(4), 640.
- Siegel, D. S., Waldman, D., & Link, A. (2003). Assessing the impact of organizational practices on the relative productivity of university technology transfer offices: an exploratory study. *Research Policy*, 32(1), 27-48.
- Siegel, D. S., Waldman, D. A., Atwater, L. W., & Link, A. N. (2003). Commercial knowledge transfers from universities to firms: improving the effectiveness of university-industry collaboration. *Journal of High Technology Management Research*, 14, 111-133.
- Siegel, D. S., Waldman, D. A., Atwater, L. W., & Link, A. N. (2004). Toward a model of the effective transfer of scientific knowledge from academicians to practitioners: qualitative evidence from the commercialization of university technologies. *Journal of Engineering and Technology Management*, 21, 115-142.
- Sobol, M. G., & Newell, M. K. (2003). Barriers to and measurements of the diffusion of technology from the university to industry. *Comparative Technology Transfer and Society*, 1(3), 255-276.
- Stark, S., & Torrance, H. (2005). Case study. In B. Somekh & C. Lewin (Eds.), *Research Methods in the Social Sciences* (pp. 33-40). London: SAGE Publications Ltd.
- Stewart, C., & Cash, W. (2006). *Interviewing: Principles and Practices* (11th ed.). New York: McGraw-Hill.
- Swamidass, P. M., & Vulasa, V. (2009). Why university inventions rarely produce income? Bottlenecks in university technology transfer. *Journal of Technology Transfer*, 34, 343-363.

- Taylor, S. J., & Bogdan, R. (1998). *Introduction to Qualitative Research Methods: A Guidebook and Resource* (3rd ed.). New York: John Wiley & Sons
- Thursby, J. G., & Thursby, M. C. (2002). Who is selling the ivory tower? Sources of growth in university licensing. *Management Science*, 48(1), 90-104.
- Toh, S. M., Morgeson, F. P., & Champion, M. A. (2008). Human resource configurations: Investigating fit with the organizational context. *The Journal of Applied Psychology*, 93, 864–882.
- Tornatzky, L. G., Waugaman, P. G., & Gray, D. O. (2002). *Innovation U: New University Roles in a Knowledge Economy*. Southern Growth Policies Board.
- Trans-Tasman Commercialisation Fund. (n.d.). *Home*. Retrieved 19 Dec 2011, from <http://www.ttcf.com.au/>
- Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. (1997). Alternative approaches to the employee–organization relationship: Does investment in employees pay off? *Academy of Management Journal*, 40(5), 1089-1121.
- Ustundag, A., Ugurlu, S., & Kilinc, M. S. (2011). Evaluating the performance of technology transfer offices. *Journal of Enterprise Information Management*, 24(4), 322-337.
- Veld, M., Paauwe, J., & Boselie, P. (2010). HRM and strategic climates in hospitals: does the message come across at the ward level? *Human Resource Management Journal*, 20(4), 339-356.
- Welman, J. C., & Kruger, S. J. (2001). *Research Methodology for the Business and Administrative Sciences* (2nd ed.). Oxford: Oxford University Press.
- Wengraf, T. (2001). *Qualitative Research Interviewing: Biographic Narrative and Semi-Structured Methods*. London: SAGE Publications Limited.
- Wilson, J. P. (2005). *Human Resource Development: Learning & Training for Individuals & Organizations*. London: Kogan Page Ltd.

- Winterton, J. (2008). Training, development, and competence. In P. Wright, J. Purcell & P. Boxall (Eds.), *The Oxford Handbook of Human Resource Management* (pp. 324-343). New York: Oxford University Press.
- Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320.
- Wright, P. M., & Nishii, L. H. (2004). *Strategic HRM and Organizational Behavior: Integrating Multiple Levels of Analysis*. Paper presented at the What's next for HRM? Conference, Rotterdam.
- Wright, P. M., & Snell, S. A. (1991). Toward an integrative view of strategic human resource management. *Human Resource Management Review*, 1(3), 203-225.
- Wright, P. M., & Snell, S. A. (1998). Toward a unifying framework for exploring fit and flexibility in strategic human resource management. *Academy of Management Review*, 23(4), 756-772.
- Yin, R. K. (2012). *Applications of Case Study Research*. United States: SAGE Publications, Incorporated.
- Yin, R. K. (2014). *Case Study Research: Design and Methods* (5 ed.). United States of America: Sage publications, INC.
- Yusof, M., & Jain, K. K. (2010). Categories of university-level entrepreneurship: a literature survey. *International Entrepreneurship and Management Journal*, 6(1), 81-96.