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**UCT  
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**A Resource-Based View of the Firm: A Path Dependency Investigation  
into the Sources of Sustainable Competitive Advantage – An Empirical  
Study of the University of Rhodesia, 1945-1980**

**Supervisor: Professor Kurt April**

Thesis Presented for the Degree of  
DOCTOR OF PHILOSOPHY  
In the Graduate School of Business  
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by  
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# **A Resource-Based View of the Firm: A Path Dependency Investigation into the Sources of Sustainable Competitive Advantage – An Empirical Study of the University of Rhodesia, 1945-1980**

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*Presented for the Degree of Doctor of Philosophy, July 2011*

## **Abstract**

This study examined the development of the University of Rhodesia (UR) and identified a pattern that developed in a path dependent way. Path dependency captures the notion that choices, that are made when an institution is being formed, tend to have a continuing and lasting influence on the institution far into the future. It is the tendency for a step in one direction to encourage the next step to be in a similar direction, thus keeping the development of an organisation in the same path. Studies have criticised the resource-based view of the firm (RBV) and path dependency concepts as being under-theorised and under-served empirically. This study examined and clarified factors that were crucial in the emergence of UR, and helped to perpetuate its dominance over time.

Based on a case study of UR from 1945 to 1980, this study used semi-structured interviews, questionnaires and document analysis to give in-depth understanding of contextual issues and dynamics shaping the development of UR, and its ensuing path dependency. Interview data was collected from 73 former students, current and former academics and administrators over a 10-month period. Questionnaires were deployed to 80 respondents. The purposive sampling technique was used to select the respondents, and the complete list of respondents evolved through the study using the snowballing technique. Qualitative data was collected and analysed (with the aid of data analysis software, Nvivo 8) according to the grounded theory approach. Data from questionnaires was analysed using the Statistical Package for Social Scientists (SPSS). Five determinants of path dependency, which emerged from the review of literature, were used as a basis for linking the emerging themes and developing a conceptual framework of organisational path dependency.

The study established that the evolution of UR was path dependent and influenced by initial conditions, increasing returns, self-reinforcement, positive feedback and lock-in. Some of the enduring characteristics of UR that define its competitive advantage include the British influence, the system of external examiners, and elitist and multi-racial character of the institution.

A major contribution of this study is the development of a framework of organisational path dependency that improves our understanding of the enduring characteristics of an institution that define its competitive advantage.

This study examined sources of sustainable competitive advantage in an institution of higher education in an emerging economy. It, therefore, might not be applicable to other organisations in different environments.

Future research can use the conceptual framework to verify its empirical relevance. Other researchers can assess the resilience of the founding conditions and patterns that shaped the development of UR in a post-colonial setting.

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## Glossary

**'A' Level:** Advanced Level

**Capability:** The capacity for a team of resources to perform some task of activity.

**Competitive Advantage:** It is the unique position an organisation develops *vis-à-vis* its competitors through its patterns of resource deployments.

**Complementary Resource Combinations:** It arises when a resource produces greater returns in the presence of another resource than it does alone.

**Dynamic Capabilities:** The firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments.

**Grounded Theory:** It is a research strategy in which data collection starts without the formation of an initial theoretical framework. These data lead to the generation of predictions that can be tested.

**Federation of Rhodesia and Nyasaland:** This was a union formed in 1953 by three countries: Southern Rhodesia (now Zimbabwe), Northern Rhodesia (now Zambia) and Nyasaland (now Malawi). It broke up in 1963.

**Increasing Returns:** This means that each step along a particular path makes that path more attractive. The more an action is taken, the greater its benefits.

**IO:** Industrial Organisation

**Lock-in:** It is a hard-to-escape situation. Once a choice has been made, it discourages other behaviour.

**MP:** Member of Parliament

**'O' Level:** Ordinary Level

**Path Dependency:** Path dependency suggests that current phenomena cannot be adequately understood without knowledge of how they have been shaped by past events. It captures the tendency for a step in one direction to encourage the next step to be in a similar direction. What has happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time.

**Positive Feedback:** This means that the more people use a product or service, the more the number of people who use that product or service.

**RBV:** Resource-based View

**R&D:** Research and Development

**Resource:** It is an observable asset that can be valued and traded. It is an input to production that an organisation owns and controls.

**Royal Charter:** The Royal Charter set up the University College of Rhodesia and Nyasaland as an autonomous seat of higher learning in the Federation of Rhodesia and Nyasaland. The Charter espoused the principle of non-racialism.

**RUA:** Rhodesia University Association

**SCA:** Sustainable Competitive Advantage. This is when a firm is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors.

**Self-reinforcement:** This is when taking an action puts in place a set of forces that encourage that choice to be sustained.

**Sensitivity to Initial Conditions:** This means that small changes in the original position make for very large changes in outcome.

**SWOT:** Strengths, Weaknesses, Opportunities and Threats

**SPSS:** Statistical Package for Social Scientists

**UDI:** Unilateral Declaration of Independence

**UK:** United Kingdom

**UR:** University of Rhodesia. The University of Rhodesia was established as the University College of Rhodesia and Nyasaland (UCRN) in 1953. It then became the University College of Rhodesia (UCR) after the dissolution of the Federation in 1963. After the severing of special relations with the University of London in 1971, it became the University of Rhodesia (UR). In 1980 at independence it changed its name to the University of Zimbabwe (UZ). The study ends in 1980 and so the researcher has used University of Rhodesia (UR) throughout the study for consistency.

**VCR:** Video Cassette Recorder

**VHS:** Video Home System

**VRIN:** Valuable, Rare, Inimitable, Non-substitutable

**ZANU:** Zimbabwe African National Union

**ZAPU:** Zimbabwe African Peoples' Union

University of Cape Town

## **CHAPTER 1: INTRODUCTION**

### **Introduction**

This study examined the history of the University of Rhodesia (UR) through the lens of path dependency. It looked at the development of the institution over the period 1945 to 1980, and identified a pattern that developed in a path dependent way. Choices that are made when an institution is being formed, or when a policy is being initiated, tend to have a continuing and lasting influence on the institution far into the future (Sydow, Schreyögg, & Koch, 2009). According to path dependency (Greener, 2002), a step in one direction tends to encourage the next step to be in a similar direction, thus keeping the development of the institution in the same path. Therefore, it is significant to understand and establish the role of path dependency in the development of the University of Rhodesia (UR), and how this shaped the sustainability of its competitive advantage over time.

### **Statement of the Problem**

This study explored the evolution of UR, and sought to establish whether the development of the institution exhibits properties of path dependency (Page, 2006), i.e., whether there was evidence of the influence of initial conditions, increasing returns, self-reinforcement, positive feedback and lock-in. Path dependency suggests that initial conditions/moves are strategically linked to future direction and, once a particular path has been adopted, it becomes more and more difficult to change that path (Foray, 1997; Goulielmos, 2005; Greener, 2002; Mwangi, 2006; Pierson, 2000). In view of this trajectory, the study sought to clarify the factors that were crucial to the origins of UR and how these factors helped to perpetuate UR's dominance over time.

The aim of this study was to identify the enduring characteristics that reflect a path dependent organisation. Among other things, the study will help managers to understand the enduring characteristics and patterns that define the emergence of organisations. It will also explain how initial conditions, self-reinforcement, increasing returns, positive feedback and lock-in help organisations achieve competitive advantage. By understanding the in-depth



processes and dynamics in the evolution of organisations, managers can see patterns that help organisations achieve competitive advantage.

### **Research Questions**

1. Was the rise of the University of Rhodesia (UR) to prominence a function of its initial conditions? According to Zyglidopoulos (1999, p. 246), sensitivity to initial conditions means that “initial environmental conditions can mould and constrain the organization’s behavior during the subsequent stages of its lifecycle”. For example, life transitions and exponential behaviour distributions have been shown to affect the psychological behaviours, motor abilities and even the physical characteristics of athletes in sports – and these are now being used to identify and develop talent, in relation to future performance, which is very different from traditional talent identification techniques (Abbott, Button, Pepping & Collins, 2005).
2. Did increasing returns influence customers to consider the University of Rhodesia as a destination of choice? Page (2006, p. 88) defines increasing returns as “the more a choice is made or an action is taken, the greater its benefits”. For example, the increased use of a technology encourages investments in the linked infrastructure, which in turn attracts more users to the technology (Arthur, 1994).
3. What forces reinforced the University of Rhodesia as a destination of choice? Self-reinforcement is described by Page (2006, p. 88) as, “making a choice or taking an action puts in place a set of forces or complementary institutions that encourage that choice to be sustained”. Thus the widespread adoption of a technology makes it advantageous for newcomers to the field to fall in with the standard (Arthur, 1994).
4. What role did positive feedback play in the rise of the University of Rhodesia to prominence? Positive feedback is “the supportiveness of an environment for a particular behaviour or outcome” (Svyantek & Brown, 2000, p. 7). Technologies typically improve as more people

adopt them and firms gain experience that guide further development (Arthur, 1994).

5. To what extent did the subsequent popularity of the University of Rhodesia lock-in customers and help to suppress the consideration of alternatives? Lock-in means that “one choice or action becomes better than any other one because a sufficient number of people have already made that choice” (Page, 2006, p. 88). Lock-in is a hard-to-escape situation. By developing a specific product, firms limit and structure possibilities of future actions open to them (Teece, Pisano & Shuen, 1997).

### **Research Objectives**

1. To provide definitional clarity and raise the level of analytic precision of the concept of the resource-based view of the firm (RBV) and path dependency, by explicating their origins, insights and current status.
2. To refine and solidify the concepts of RBV and path dependency in order to validate their main prescriptions so as to allow their application in organisations.
3. To empirically explore path dependency as a source of competitive advantage.
4. To analyse the University of Rhodesia’s historical development and strategic responses as a case study, in order to establish enduring characteristics of an organisation that are a source of competitive advantage.
5. To adapt the concept of path dependency to the study of business management so that managers may be able to understand why conditions of emergence like initial conditions, self-reinforcement, increasing returns, positive feedback and lock-in can be sources of competitive advantage.

### **Research Proposition**

The development of the University of Rhodesia exhibits identifiable properties of path dependency.

*Alternatively:* The development of the University of Rhodesia does not exhibit identifiable properties of path dependency.

### **Theoretical Reflection**

It is a truism that seeking the source of sustainable competitive advantage (SCA) is one of the dominant areas of research in the field of strategic management. Management theorists (Andrews, 1971; Ansoff, 1987) have explicated firm performance from the perspective of external factors using environmental models of competitive advantage, i.e., SWOT analysis (Andrews, 1971) and Porter's five forces analysis (Porter, 1979). This structure-conduct-performance paradigm (Porter, 1981; Ajlouni, 2010) dominated strategic management literature for a long time, and it suggests that industry structure determines firm conduct and thus firm performance (Porter, 1981). As a result, the link between strategy and the firm's resources and skills was comparatively neglected (Grant, 1991). However, as knowledge frontiers continue to grow in complexity and in speed, new thought/analytical tools in strategic management have emerged to help organisations navigate the 'murky waters' of organisational life. One such way of thinking is the resource-based view of the firm (RBV).

In the 1980s and 1990s, the RBV emerged as an alternative analytical lens that switched the focus from the external environment, typified by Porter's paradigm (1980; 1985), to internal resources and capabilities. Thus early attempts to explain firm performance from the perspective of resources (Penrose, 1959) were rekindled by Barney (1991), Wernerfelt (1984), Grant (1991) and Rumelt (1984), among others. This led to the emergence of the RBV, which has now become one of the dominant approaches to studying competitive advantage within the strategy discipline. Its key proposition is that differences in firm strategy and performance are primarily driven by unique resources and capabilities that a firm possesses, or in the way in which these resources and capabilities are combined and utilised (Penrose, 1959). This school of strategy development theory continues to make a significant contribution to strategy research.

### **Types of Resources**

According to RBV theory, there are three types of resources, namely tangible and intangible resources and organisational capabilities (Barney, 1991).

Tangible resources include plant, equipment and bank deposits (Barney, 1991). Intangible resources include trademarks, patents and company reputation (Collis & Montgomery, 1995). Capabilities include individual skills and organisational routines (Bitar & Hafsi, 2007). Prahalad and Hamel (1990) use the term “core competence” to describe strategic capabilities.

Barney (1991) presents a comprehensive framework to identify the needed characteristics of firm resources which generate sustainable competitive advantage<sup>1</sup>. According to Barney (1991), for resources to be a source of SCA, they must meet four criteria, namely: value (i.e., contribute to firm efficiency and effectiveness), rareness (i.e., not widely held), inimitability (i.e., they cannot be easily replicated by competitors), and non-substitutable (i.e., other resources cannot fulfil the same function). He further suggests that capabilities to transform commonly available resources into valuable, rare, inimitable, and non-substitutable resources are a barrier to imitation if these capabilities are: (i) physically unique, (ii) socially complex (no-one really understands how the resources are actually transformed), (iii) causally ambiguous (no-one understands how capabilities actually result in the final product), or (iv) path dependent (the transformation of resources occurs over time and is rooted in the past). The concept of path dependency, specifically, has been examined by studying the evolution of UR.

### **Path Dependency**

#### **Definition**

According to Zukowski (2004), in spite of being widely used, the term ‘path dependency’ does not yet have a commonly accepted, precise definition. The concept originated as an idea that a small initial advantage, or a few minor random shocks along the way [organisational life-cycle], could alter the course of history (David, 1985). It entails the argument that past events influence

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<sup>1</sup> While competitive advantage derives from firm-specific resources that are rare and superior in use relative to others (Peteraf & Barney, 2003), sustainable competitive advantage is when current and potential competitors are unable to duplicate a firm’s specific resources (Barney, 1991). Both concepts require that resources have characteristics of exclusivity and inimitability. However, while competitive advantage is a source of superior performance, sustainable competitive advantage is the path to prolonged superior performance (Porter, 1985).

future events – what has happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time (Mahoney, 2000). It conveys the idea that “current and future states, actions and decisions depend on the path of previous states, actions, or decisions” (Page, 2006, 88). Path dependency is when an unfolding sequence of events is shaped by particular events that occurred in the past (David, 2007).

Path dependency suggests that current phenomena cannot be adequately understood without knowledge of how they have been shaped by past events (Mwangi, 2006). According to Kay (2003), a system is path dependent if initial moves in one direction elicit further moves in that same direction. Once a particular path has been adopted, it becomes more and more difficult to change that path or to select previously available options, even if those earlier alternatives would have been more efficient (Mwangi, 2006).

Teece *et al.* (1997) argue that the concept recognises that ‘history matters’. However, Mahoney (2000) warns against defining path dependency as nothing more than the vague notion that ‘history matters’ or that ‘the past influences the future’. Such general definitions, so argues Mahoney (2000, p. 507), “have led scholars inappropriately to understand path dependency as a form of analysis that simply traces outcomes back to temporally remote causes”.

The concept of path dependency was first used by economists to explore technological processes, and was associated with increasing returns processes (Arthur, 1989; 1994; David, 1985). It was initially applied to account for the phenomenon of persistent domination by inferior technologies in competitive markets, despite the availability of a superior rival (Nee & Cao, 1999). David’s (1985) best-known work in this area is his discussion of the layout of the QWERTY typewriter keyboard. The QWERTY keyboard story can be summarised as follows: the strike mechanism of the earliest mechanical typewriters was prone to jamming, so the typewriter’s inventors designed the QWERTY keyboard in order to slow down typing speed (Liebowitz & Margolis, 1994). Typists thus remain burdened by this speed-

reducing design today, even though a competing Dvorak keyboard exists – scientifically designed to be easier to learn and to allow greater speed (Liebowitz & Margolis, 1994).

However, in forceful critiques, Liebowitz and Margolis (1990; 1995) argue that the evidence in the standard history of QWERTY is flawed and incomplete. They suggest that perhaps the best evidence of the empirical shortcomings of path dependency is the continued use of the story of the QWERTY keyboard as the paradigmatic case to support the theoretical model of path dependency (Liebowitz & Margolis, 1995). Later on the concept of path dependency was adapted by historical sociologists, political scientists and specialists in organisation theory (Zukowski, 2004).

### **Causes of Path Dependency**

According to Page (2006) the literature on path dependency reveals five related causes: sensitivity to initial conditions, increasing returns, self-reinforcement, positive feedbacks, and lock-in. These will be discussed below.

#### **Sensitivity to Initial Conditions**

Path dependency can be seen at work in the establishment of such technologies as the VHS video recorder and Windows 95 computer software as industry standards (David, 1985). David (1985) argues that technologies may be locked in as a result of quite minor contingencies, or accidental chance events. This sensitivity to initial conditions refers to “deterministic dynamic systems in which the trajectory depends sensitively on the initial point of the system” (Page, 2006, p. 91). Thus one random event can select a particular path, the choice becomes locked in regardless of the advantage of the alternative (Goulielmos, 2005).

This sensitivity to initial conditions is accompanied and motivated by mathematical literature known as chaos theory or complexity models (Liebowitz & Margolis, 1995). Chaos theory asserts that some phenomena are extremely sensitive to the initial conditions that small changes in the

original position make for very large changes in outcome. This concept is similar to the so-called 'butterfly effect' conception, which states that a small change in initial conditions comparable to a butterfly flapping its wings can drastically change the long-term behaviour of a system. Weather patterns are so complex, the argument runs, that a butterfly flapping its wings today on one side of the globe could induce a torrential downpour next week on the other side of the globe (Roe, 1996). The mathematical variant of chaos theory is however, removed from our present concern.

### Increasing Returns

Pierson (2000) regards increasing returns as self-reinforcing or positive feedback processes. Increasing returns dynamics capture two key elements central to path dependency: (a) they pinpoint how the costs of switching from one alternative to another will increase markedly over time, and (b) they draw attention to issues of timing and sequence (Pierson, 2000). Each step along a particular path produces consequences which make that path more attractive for the next round (Pierson, 2000). As such, effects begin to accumulate, and they generate a powerful cycle of self-reinforcing activity. This means that "the more a choice is made or an action is taken, the greater its benefits" (Page, 2006, p. 88). According to Arthur (1989, p. 128), increasing returns can cause the economy "gradually to lock itself in to an outcome not necessarily superior to alternatives, not easily altered, and not entirely predictable in advance".

### Self-reinforcement

Self-reinforcement means that "making a choice or taking an action puts in place a set of forces or complementary institutions that encourage that choice to be sustained" (Page, 2006, p. 88). According to Arthur (1994, p. 93), although a standard itself may not improve with time, "widespread adoption makes it advantageous for newcomers to a field – who must exchange information or products with those already working there – to fall in with the standard".

### Positive Feedbacks/Externalities

Sterman and Wittenberg (1999) state that, through positive feedbacks, a successful paradigm alters its environment by suppressing the creation of competitors and rapidly starving any competitors that do emerge of the resources needed to succeed. Network externalities induce persistence, i.e., there is an advantage to using a dominant choice when it is the one with which players are most familiar (Becbchuck & Roe, 1999). Put differently, “an action or choice creates positive externalities when that same choice is made by other people” (Page, 2006, p. 88). According to Liebowitz and Margolis (1994), network externalities arise when the utility that a user derives from consumption of the good increases with the number of other agents consuming the good. Goodstein (1995, p. 1030) agrees:

*... technological progress can proceed along a variety of paths: once a path is chosen, however, positive feedback mechanisms (scale economies, R&D commitments, complementary investments, increasing consumer acceptance) lock society into that path.*

Arthur (1994, p. 92) adds another voice to this affirmation: “the more people adopt a technology, the more it improves and the more attractive it is for further adoption”.

Choi, Millar, Chu and Berger (2007) call this positive feedback, ‘social herding’ – it is like fashion – choice is dependent on what is *en vogue*. A consumer’s choice depends on the decisions of others – the sheer numbers of customers adopting a particular choice in the early stage creates a pressure causing others to adopt this choice in the later stage (Choi *et al.*, 2007).

### Lock-in

According to Page (2006, p. 88), “lock-in means that one choice or action becomes better than any other because a sufficient number of people have already made that choice”. Teece *et al.* (1997, p. 523) further elaborate – this process of lock-in by historical events is a situation whereby “companies with the best products will not always win, as chance events may cause ‘lock-in’ on



inferior technologies”. Thus a technology that improves slowly at first but has enormous long-term potential could easily be shut out, locking the economy into a path that is both inferior and difficult to escape (Arthur, 1994).

Barnes, Gartland, and Stack (2004, p. 373) explain how in the US, “due in part to financial market pressure, managers and other organizational leaders tend to focus on short-term profitability rather than longer-run growth and firm survival”. This is behavioural lock-in. According to Barnes *et al.* (2004, p. 373):

*Once a particular behaviour is embedded in organizations, a strong status quo inertia may discourage other behaviour. It takes tremendous effort to change, and individuals may simply be uninterested (even when they suspect it is necessary).*

### **Justification**

Although RBV theory has come under criticism of late (Priem & Butler, 2001), it has become a dominant perspective for explaining superior firm performance in recent years. However, whether one is an opponent or an advocate of RBV, is not of prime interest; “what is more important is to suggest how it could be clarified, improved and developed” (Bowman & Ambrosini, 2003, p. 289). This study is a response to that call. Despite its popularity and appeal as a theory, RBV has not been extensively tested empirically. Miller and Shamsie (1996, p. 521) warn us that “there is need for more systematic empirical studies to examine the conceptual claims of the resource-based scholars”. Fahy (2000, p. 99) concurs with this admonition:

*... to date the vast majority of contributions within the RBV have been of a conceptual rather than an empirical nature, with the result that many of its fundamental tenets still remain to be validated.*

This study attempts to empirically test the validity of path dependency. In this way, it intends to add to the body of empirical research that seeks to verify one of the main prescriptions of RBV. Antonelli (1997) posits that path

dependency can help to constitute a general framework to study the evolution of industries and firms. This is important because one of the enduring problems facing the field of Strategic Management has been the lack of theoretical tools available to describe and predict the behaviour of firms and industries (Levy, 1994). Where empirical application of path dependency has been attempted (Choi *et al.*, 2007; Cox, 2004; Haynes, 2007; Lamberg & Tikkanen, 2006; Miller & Shamsie, 1996; Puffert, 2002; Torfing, 2001; & Zukowski, 2007), such studies have been undertaken at a macro level and in strong economies. The only study that is an exception to this rule is Mwangi (2006), which was undertaken in the context of an emerging market. This research seeks to fill this gap by testing the applicability of the concept of path dependency in the context of an organisation in another emerging economy.

Further, the major focus of the study involves an in-depth assessment of the utility and validity of path dependency in the context of one institution – University of Rhodesia – thus allowing for a more detailed analysis of a particular organisation. Kay (2003) challenges scholars employing the concept of path dependency to develop frameworks, theories and models. This thesis seeks to establish and explain whether the emergence and persistence of the University of Rhodesia as an institution of higher learning is path dependent. Although the research question is basic and fundamental, it has not been appropriately tested in emerging economies.

Path dependency is applied to clarify and understand the factors that were crucial to the origins of the University and those that have perpetuated its dominance over time. The concept also helps clarify how some random moments in the history of the University have left us stuck with this institution.

This study clarifies certain ambiguities surrounding this concept of path dependency, by refining the concept and modifying it to allow its application in organisations in emerging economies. This will help managers to understand that particular sequencing of events, or processes, play a key part in explaining divergent outcomes (Pierson, 2000). By grasping the determinants and patterns of path dependency in emerging economies, managers may set

more realistic aspirations regarding the possibilities for achieving reasonable predictability in business (Pierson, 2000).

Further, the RBV concept (Barney, 1991) does not articulate the characteristics of path dependency, i.e., initial conditions, chaos and complexity, positive feedback, increasing returns, self-reinforcement, and lock-in, despite the importance and currency of these factors in strategic management. This study therefore seeks to close this gap by examining the concept of path dependency and its implications for organisational competitiveness.

It is important for academics and practitioners to understand the empirical relevance of the phenomenon of path dependency as an explanation of what gives organisations an advantage, so that they can appreciate the sources of organisations' current, and ongoing, success. By adopting path dependency to the study of business management, managers can more fully appreciate conditions that impede or facilitate business success or failure. Better understanding of the influence of history on the emergence of organisations will help managerial decision-making. Pierson (2000, p. 265) posits that:

*The study of path dependency will help managers to appreciate why previously viable options may be foreclosed in the aftermath of a sustained period of positive feedback, and cumulative commitments on the existing path will often make change difficult and will condition the form in which new branchings will occur.*

Contrary to the principle of decreasing marginal returns (Pierson, 2000), where economic actions engender negative feedback, the study presents the concept of increasing returns which reflects how, the more an action is taken, the greater are its benefits. By challenging the economics wisdom of decreasing returns, the study of the concept of path dependency will make the revision and generation of theory a legitimate enterprise.

Path dependency has been used to explore technological processes in the past. However, in regard to its application in business development, it is clear that the concept is under-theorised and under-served empirically, hence the motivation for this research.

Although institutions like UR are important but under-researched, they have been one of the decisive factors in the economic and social growth of the Rhodesian/Zimbabwean economy and society. By applying path dependency to the development of UR, this will help us better distinguish, analyse and understand processes of institutional change. The path dependency perspective therefore helps us to improve our understanding of organisational transitions – especially of complex organisations operating in business environments characterised by high unpredictability and high complexity.

Further, given that UR developed in a unique environment, the role of the University in that environment is different from the role that would normally be assigned to a University in developed economies. While the role of the University in developed economies in the main is to develop intellectual capacity, in the highly complex and unpredictable economies of emerging markets, the University plays both a social and developmental role. Thus the unique circumstances under which UR developed can be difficult to replicate. In this regard, new entrants would experience difficulties catching up with UR. Their only option would be to fundamentally redefine the rules of the game, the rules of engagement.

The study assesses whether UR was a successful organisation or not. The issue of organisational success is a necessary part of the study because it reflects how institutions build capabilities to ensure the long-term sustainability of that advantage. The UR character and reputation were developed over time. Chapter 2 provides a history of UR and sets a compelling rationale for the establishment of a unique institution. White Rhodesians wanted to build a successful and unique institution. The institution was to be directed towards the needs of Europeans so that it would have a profound and civilising influence upon the White community. Given this background, it became

imperative in this study, to establish the extent to which this institution met the characterisation of being a successful organisation.

### **Scope of the Study**

The study is a case study, and investigates the development of the University of Rhodesia (UR) between 1945 and 1980.

### **Structure of the Thesis**

**Chapter One** provides a background to the research. In this Chapter, the statement of the problem is explicated, research questions detailed, and objectives outlined. The researcher then explains the research proposition before providing a justification for and scope of the study.

In **Chapter Two** the researcher provides a detailed history of the University of Rhodesia (UR) and discusses the major milestones in the development of this institution from 1945-1980. In **Chapter Three** a literature review is undertaken. It samples current opinions on the subject of RBV and path dependency and clarifies how the statement of the problem fits into the debate in the literature. In **Chapter Four** the methodology adopted for the study is discussed. The chapter looks at the different research approaches, i.e., quantitative and qualitative research, data collection methods, and discusses how data was actually collected and analysed. **Chapter Five** discusses the findings of the research and reveals the emerging themes. A new conceptual framework of path dependency is revealed, that improves our understanding of contextual issues and dynamics shaping the emergence of organisations. **Chapter Six** assesses whether UR was a successful organisation and whether UR's competitive advantage shows the influence of the dynamics of path dependency. **Chapter Seven** discusses the contribution of this study, its limitations and suggests areas for future research.

## **CHAPTER 2: HISTORY OF THE UNIVERSITY OF RHODESIA (1945-1980)**

### **The Beginnings**

According to Atkinson (1972), the decision to establish the University College came as a result of a series of events within the Central African territories and outside. Maxwell (1980, p. 229) posits that the idea of a University stemmed from two initiatives – “one private and directed towards the needs of Europeans ... and the other official and devoted to African needs”. Michael Gelfand (1978) agrees and explains the founding of the University as involving three forces.

Firstly, the British Government was anxious to foster higher education in Central Africa to Africans. This growing sense of obligation to provide social reforms in colonial territories overseas was being felt by British imperial administrators as World War II drew to a close (Atkinson, 1972). With the rapid growth of nationalism among colonial peoples, it became desirable to lay foundations of a stable political and social order (Atkinson, 1972). Higher education would provide a means of producing local African leaders who were fitted for the responsibilities of government (Atkinson, 1972).

Secondly, the Rhodesians themselves were trying to start a ‘White’ University; and thirdly, some idealists such as Alexander Carr-Saunders and Walter Adams of the Inter-University Council for Higher Education came up with the idea of fusing the two initiatives. The idea took shape with the founding of a movement for the foundation of a University – the ‘Friends of the University of Southern Rhodesia’, which later changed its name to the Rhodesia University Association.

In October 1943, James Frederick Kapnek, a Hungarian-born philanthropic Jewish businessman, presented the Southern Rhodesian Government a gift of £20 000 for the founding of a University as an act of thanksgiving for allied war-time victories (Mackenzie, 1987). Kapnek’s offer is the fourth force which may have helped trigger the idea of the need for a University for the country,

and thus shaped the trajectory of events. These initiatives are discussed in more detail below.

### **Feasibility of the University Project**

According to Gelfand (1978), Kapnek's offer was given publicity and it caused people to discuss the subject and debate whether a University was necessary. Thus the beginnings of the University were indebted to the work of Kapnek. The enthusiasm for a University was, however, not reflected in the public sentiments that were expressed in various media. Such support, as was forthcoming, was at first lukewarm (Maxwell, 1980). Some thought that the project was premature and ill-suited to the practical needs of the country (Maxwell, 1980). Gelfand (1978) argues that among some members of the White population, there was considerable doubt as to the feasibility of the project and sometimes indifference to the idea. At this stage, the idea of African participation was not raised because, in 1943, higher education for Africans was non-existent in the country and few Whites believed that sufficient numbers of them were ready to enter a University (Gelfand, 1978).

### ***Voices Against the Establishment of a University***

In an editorial in August 1942 the Editor of the *Sunday Mail* in Rhodesia considered that the idea of establishing a University of its own by Southern Rhodesia was at that time "... too great an undertaking for the country" (*Sunday Mail*, 1942). He considered that a University College, affiliated to the University of South Africa (UNISA), might be a more practical proposition. This is not difficult to understand – there existed a historical link that many Rhodesians had with South Africa, and many parents had themselves been educated there (Gelfand, 1978).

Soon after Kapnek's offer, Colonel Brady (MP), a former headmaster of Milton School, Bulawayo, brought up in Parliament the subject of a University and demanded an expert enquiry into the need for one (Gelfand, 1978). However, the Chief Education Officer, A.G. Cowling, was quick to point out the scheme was premature:

*There were 136 Rhodesian White students in South Africa in 1943 and about 40% of them were in medical and engineering faculties. Even if Southern Rhodesia had its own University, these two expensive faculties could not be started for some time, and so a large proportion of the students would still have to leave the country (Cowling, 1944).*

Cowling was not impressed by the Kapnek gift, which he considered too small to be of value in starting a University. Thus the Education Department played a wait-and-see attitude, afraid that the whole idea was premature.

In 1945 a group called the 'Friends of the University of Rhodesia' was set up to promote the establishment of a University in Southern Rhodesia (Gelfand, 1978). In 1947 the 'Friends of the University of Rhodesia' changed its name to the Rhodesia University Association. The campaign of the Rhodesia University Association for the establishment of a University gave rise to controversy and a division of opinion. Some argued that it was too early for the country to start a University of its own on the grounds that the population and resources were still too small, that a Rhodesian University would be second-rate, parochial and too limited in its scope (RUA, 7 Sept., 1950). People felt that it would not be propitious to establish a University because of the difficulties of obtaining first class staff and the need to expand Polytechnic courses (Chadwick, 5 Nov., 1946). It was also argued that Rhodesian students would be better to go out of the country to older and bigger Universities in the United Kingdom and South Africa (RUA, 7 Sept., 1950). In any case, it was reasoned, the problems of race would be too difficult to solve.

### ***Voices in Favour of the Establishment of a University***

On 14 May 1944, the Editor of the *Sunday Mail* in Rhodesia took up the cudgels in favour of a University (*Sunday Mail*, 1944). He argued that the South African Universities were showing signs of becoming overcrowded and that it was possible that after World War II they might not be able to take in students from outside their own country (*Sunday Mail*, 1944). In support of the idea of a University, the Rhodesian community also felt that if the White man were to survive, each child of European descent would have to be given



the fullest opportunity to keep abreast, and a local University was therefore important (Gelfand, 1978).

The Governor of Southern Rhodesia and Patron of the Rhodesia University Association, Sir John Kennedy, said that some people who were in favour of the establishment of a local University reasoned that a growing country like Rhodesia could not eventually do without a University, because the number of students who could go to Universities in the United Kingdom or the Union (South Africa) would always be comparatively small for reasons of expense (RUA, 7 Sept., 1950). Most parents could not afford to meet the cost of sending their children to Universities outside the country. Under these circumstances, higher education was only open to those parents who were comparatively well-off (RUA, 1947).

It was also argued that the number of those who could obtain University education outside the country was becoming too small for the needs of the country. Besides, some argued:

*Rhodesia was different from other countries with a comparable European population because the European community was predominantly one of leaders. To that extent a higher proportion had to be trained for responsible and skilled professionals... Also a high proportion of our children are qualified for University training by reason of the country's system of free secondary education. Thirdly, the population of the country was increasing rapidly and this increase was likely to continue (RUA, 7 Sept., 1950).*

The establishment of a University was a consequence of the expansion of secondary school facilities. According to Atkinson (1972, p. 146), "there was now a demand for specialist degree courses capable of producing teachers of subjects at Advanced level..." Besides, a University could supplement the work of Technical Schools and Colleges, Polytechnics, and Mining Schools by setting high standards for them on the theoretical side (RUA, 1947).

Some sections of the Rhodesian population also justified the need for a University by asserting that a University would have a profound and civilizing influence upon the whole community in respect of the following:

*The religious life of the community; respect for law and order and the sanctity of the judiciary, the building of a tradition of public service and the maintenance of the standards of education. The idea is also in harmony with the spirit of determination and courage with which seemingly impossible difficulties have been tackled in the past and overcome (RUA, 7 Sept., 1950).*

In the same vein, it was also argued that, "In modern times, the trained mind has an advantage in every way of life. Leadership, initiative and a sense of proportion and balanced judgement are needed in every class of citizen" (RUA, 1947, p. 15).

Other justifications for the need for the establishment of a University were that Rhodesia was in a unique position to play a leading role in the affairs of Africa, because it was centrally situated (RUA, 7 Sept., 1950). It was also argued that because the country had a number of scientific, agricultural, medical and mining problems, an undergraduate should pursue his [or her] studies in his [or her] own region before he [or she] traveled to other countries to seek education (RUA, 7 Sept., 1950). If he [or she] did not do this, he [or she] would be divorced from the aims and endeavours of his [or her] own country.

In his campaign for the establishment of a University, the President of RUA, L. M. N. Hodson pointed out that Rhodesia was the only self-governing part of the [British] Empire which had not its own University (RUA, 7 Sept., 1950). It was also estimated that more than 150 students would attend a University in Rhodesia. Even if they did not come to that number, Hodson argued, "a Rhodesian University would draw recruits from the surrounding territories. Most of the Universities in the Union [South Africa] started with even smaller numbers than the estimated enrolment in Rhodesia". The University of Witwatersrand, in South Africa, had 77 students in 1916, and in 1922 the

number was 983. In 1939 the number had risen to 2 544 and today [1946] 5 370 (RUA, 7 Sept., 1950).

The matter for a University had also become urgent owing to a large number of immigrants who had arrived, and others who would be coming in ever increasing numbers (RUA, 1947). In 1947, it was estimated that over 2 000 European immigrants under the age of 16 were entering Southern Rhodesia (RUA, 1947). Training in highly skilled occupations was becoming mandatory. In their justification for the need for a University in Southern Rhodesia, RUA (1947) argued that most governments often relied on trained investigators to conduct enquiries which political situations frequently demanded. It would be advantageous, they argued, “to call upon men who not only have the necessary skill but also live among us and do not have to waste time finding out the elementary facts about local conditions before they start on the real task” (RUA, 1947, p. 14).

### **‘Friends of the University of Southern Rhodesia’ and the Rhodesia University Association**

Kapnek’s offer may have also been responsible for the formation of a group called the ‘Friends of the University of Rhodesia’, later known as the Rhodesia University Association (RUA), which was set up to promote the establishment of a University in Southern Rhodesia. Kapnek was so conscious of the impact of his offer that later in October 1950 he proposed that the College be named the ‘Kapnek University’. However, the Trustees of the Rhodesia University Association replied that the naming of the University should be left to the University Council when it came into being (Gelfand, 1978).

The ‘Friends of the University of Southern Rhodesia’ first met under the Chairmanship of Lancelot Manfred Noel Hodson on 12 July 1945. Hodson, a Salisbury (now Harare) barrister, born in Natal (South Africa) in 1902 and educated at the Salisbury Boys High School (now Prince Edward School) was known for his stubborn refusal to be discouraged. The body investigated the foundation of Universities in other countries, with reference to conditions in Rhodesia (Chadwick, 1936). One of its objects was the foundation and

development of a properly equipped University in Southern Rhodesia, designed to serve the Rhodesias, Nyasaland and other African territories by providing higher education, and leading in original work and scientific research (RUA, 1947). The Rhodesia University Association (RUA) argued that although government aid was essential, the University should be independent of government control. The Prime Minister of Southern Rhodesia, Sir Godfrey Huggins, wrote to the Chairman of RUA in 1947 that:

*Unless the proposed University is to be a Government institution, which would be a mistake, I think the time has arrived to try and build on the Kapnek Fund... This is because I believe a University must have a soul and be something much more useful than a degree granting machine (RUA, 1947, p. 4).*

The Association's intention was that such an institution should operate on a non-racial basis. The aim of RUA was to raise a further £300 000.

### **Asquith Commission**

During World War II, the British Government had begun to consider the post-war needs of the Empire. In 1943, a Royal Commission was appointed under Mr Justice A. C. Asquith to consider the promotion of higher education in the colonies. Essentially it had to "consider the principles which should guide the promotion of higher education, learning and research and the development of Universities in the colonies" and to explore means whereby "Universities and other appropriate bodies in the United Kingdom may be able to co-operate with institutions of higher education in the colonies in order to give effect to these principles" (Asquith Commission, 1943).

The Commission reported in 1945 and recommended a preliminary step of setting up of University Colleges, differing from Universities only in that they lacked the power to confer degrees (Atkinson, 1972). According to Atkinson (1972), the Commission also recommended that until such time as the University Colleges had achieved sufficient standing in their own right, students would be examined for degrees by a competent academic body in

the United Kingdom, which would carry the responsibility for satisfying itself that adequate standards were being maintained. The Commission recommended that this responsibility could be discharged by the University of London, which already possessed long experience in the award of external degrees (Atkinson, 1972).

It was proposed that overseas University Colleges should be admitted to a 'special relationship' with London for the purpose of awarding degrees. The Commission also stressed that the colonial Universities should be autonomous – “colonial Universities should in effect, have full freedom to manage their own affairs” (Asquith Commission, 1943). It also recommended that academic freedom must be safeguarded against any encroachment by the State (Atkinson, 1972). There was need to invest the institutions with charters, empowering them to conduct the government of their own affairs without interference from outside (Atkinson, 1972). Another consideration was that the University Colleges should be open to all, without distinction of race, religion or creed; the only criterion to be accepted in the selection of students or staff had to be academic attainment and general suitability for University education (Atkinson, 1972).

### **Inter-University Council for Higher Education**

In 1946 the Secretary of State for the Colonies invited the Universities of Great Britain to set up an organisation, as recommended by the Asquith Commission. On 8 March 1946, representatives of the Universities constituted themselves into the Inter-University Council for Higher Education in the Colonies, later becoming the Inter-University Council for Higher Education Overseas (Gelfand, 1978). Sir James Irvine, Principal of St. Andrew's University, was elected Chairman and Sir Alexander Carr-Saunders, Vice-Chairman, with an executive committee to deal with routine and urgent matters (Gelfand, 1972).

According to Gelfand (1972), the Inter-University Council arranged frequent visits of its representatives to the Colleges it had sponsored. It helped in the selection of sites and assisted in the choice of staff. The Colleges were

autonomous and appointed their own staff, but the Council often advertised on their behalf or set up selection committees to report on applicants for vacancies if so desired (Gelfand, 1972). Most of the Principals of these University Colleges were recommended by the Council. Its main function was to ensure that the colonial Colleges were brought within the framework of the community of British University institutions (Gelfand, 1972).

### **The Central African Council and Cartmel-Robinson Committee**

In 1945 the Central African Council was established to provide contact and co-ordination of policy and action between the Rhodesias and Nyasaland, particularly in scientific, technical and educational matters (Gelfand, 1972). In 1949 the Council appointed a special committee under the chairmanship of Sir Harold Cartmel-Robinson, a former Chief Secretary in Northern Rhodesia, to consider whether a College for higher education for Africans was required in Central Africa, to establish where such a College should be situated, and to make recommendations regarding the composition and terms of reference of a commission to make final proposals for the establishment of such a College (Gelfand, 1972). The Committee made the first direct recommendations for the provision of higher education in Central Africa.

In November 1949 the Committee reported, recommending that facilities for higher education for Africans should be introduced into Central Africa. It also called for the appointment of a Commission to make a detailed investigation of the matter. According to Maxwell (1980), no further action was taken until an unexpected decision on 2 November 1950 by the South African Government to close its educational institutions forthwith to further African students from outside the Union prompted renewed attention. Official representations succeeded in securing the deferment of the ban until the end of 1953 (Maxwell, 1980). However, the changed situation persuaded the Central African Council in April 1951 to ask the Committee to reopen its enquiries.

The report of the Cartmel-Robinson Committee was presented to the Central African Council in June 1951. The British Government accepted their

suggestion and, after some 14 months, a Commission was appointed under the chairmanship of Sir Alexander Carr-Saunders in September 1952 (Atkinson, 1972). The following discussion of the findings of the Carr-Saunders Commission borrows heavily from Gelfand (1972).

### **Carr-Saunders Commission**

The Chairman of the Commission was Sir Alexander Carr-Saunders, Director of the London School of Economics, who had served on the Asquith Commission and then became the Chairman of the Inter-University Council (Gelfand, 1972). The Commission's terms of reference were primarily directed towards the planning of the College for Africans as envisaged in the Cartmel-Robinson Committee (Maxwell, 1980). The Commission arrived on 31 October 1952, remained in Central Africa until the end of November, met private people and public bodies and visited centres in Southern Rhodesia, Northern Rhodesia and Nyasaland (Gelfand, 1972).

The Commission reported in March 1953, and it strongly supported the Cartmel-Robinson Report. It reported that it was satisfied that there were enough African students available in the three territories (Southern and Northern Rhodesia and Nyasaland) to justify the foundation of a University College for them (Atkinson, 1972). The Commission considered that a University institution was not merely justified, but was urgently needed. It also reported that there were reasonable prospects of employment for African graduates (Atkinson, 1972). The Commission stated that the factor limiting the number of potential African University students was not the lack of openings for them, but the lack of University facilities (Gelfand, 1972). It advocated the creation of an institution with high academic standards, "one entitled to rank alongside other British Universities in the quality of its intellectual life" (Carr-Saunders Commission, 1953). This was to be achieved by attracting well-qualified teaching staff.

With regard to the constitution for a University, the Commission recommended the creation of a Royal Charter as was done for the inter-territorial University College of the West Indies (Gelfand, 1972). The

Commission set great weight on obtaining a Royal Charter because they thought it would be the quickest procedure since legislation would otherwise be required in each of the three territories (Maxwell, 1980). The Charter would incorporate statutes to define the composition of the College, and these could be altered only by the Queen in Council. It would therefore more securely safeguard the essential principles of autonomy and multi-raciality. The Charter and statutes would empower the Council of the College to make, amend and repeal ordinances and the Academic Board to make, amend and repeal regulations (Gelfand, 1972). Also it would help lift the matter out of current politics.

The ordinances and regulations would deal with practical matters, such as academic administration and detail of organisation. The organs of government would be the Council and Academic Board, and the two most important officers, the President and Principal (Gelfand, 1972). People of all walks of life would be on the Council – Members of Parliament, churchmen, representatives of learned societies, professions and bodies and selected members of the academic staff (Gelfand, 1972).

The President's Office would be similar to that of Chancellor of a British University. The Principal would correspond to that of the Vice-Chancellor and would be the chief academic and executive officer of the College to guide academic and financial policy and establish an efficient system of committees (Gelfand, 1972). He would be a member of the College Council and of all other College bodies. In academic matters, he would foster the independent responsibilities of the faculties and their Deans and the departments and their Heads (Gelfand, 1972). The Council would be the supreme body governing the College, controlling property and finance and appointing all the staff, except the President (Gelfand, 1972).

The academic staff would be appointed by the Council only on the recommendation of the Academic Board (Gelfand, 1972). The Academic Board was to be fully responsible for academic matters and would be purely academic in composition. The College was to be completely autonomous. It



would have to depend on public funds and would therefore have a duty to keep the public and the three Governments informed of its activities (Gelfand, 1972).

The Commission suggested that the College apply to be received into 'special relationship' with the University of London. The University of London could lower the standard of entrance for colonial Universities, but in compensation, instead of the normal minimum period of three years for a degree, a four-year minimum would be demanded (Gelfand, 1972).

The Commission recommended that the College would start with a Faculty of Arts, which should include History, English, Geography, Government and Public Administration and a Faculty of Science, comprising Physics, Chemistry, Zoology, Botany and Mathematics. Classical subjects, such as Greek and Latin, would be included as well as modern languages such as French and Portuguese (Gelfand, 1972). The Commission considered the courses would be for general degrees rather than Honours degrees. In addition, the College would have a Department of Education and one of Agriculture and Veterinary Science from the beginning (Gelfand, 1972). A postgraduate diploma in education was essential for teaching in secondary schools. The Commission also drew attention to the need for fully qualified African doctors and considered the College should make arrangements to train them. The Commission referred to the hospital, then under construction, about to become known as Harare Hospital (Gelfand, 1972). The Commission considered that this hospital would make a good teaching hospital (Gelfand, 1972).

A major requirement of the Commission's terms of reference was to advise on the site. This aspect of its duties was complicated by the Rhodesia University Association's project. The Commission examined four possibilities: (i) to set up two institutions in, or near, Salisbury between which there would be a working agreement leading to co-operation in respect of certain other activities; (ii) to set up two quite independent institutions in or near Salisbury; (iii) to transform the institution projected by the Association so that it assumed

the characteristics of the University recommended by the Commission; and (iv) to select another site for its own proposed University (Maxwell, 1980).

The Cartmel-Robinson Report had mentioned a place at Highfield on which might be built an African College to operate in co-operation with the Southern Rhodesia one already being planned. The possibility was rejected, not so much because of the unsuitability of the Highfield site and the inconvenience to staff and students of having to move between two separate sites, but because such a proposal would clearly involve racial segregation (Maxwell, 1980). The Commission preferred a fully autonomous multi-racial University, rather than two Universities with racial segregation (Gelfand, 1972). The second was also rejected, as it would dissipate the available resources between two Colleges. The idea of two completely independent Universities was quite unacceptable since it meant segregation, with doors closed to racial co-operation (Gelfand, 1972). In any case, to build two University institutions in, or near, the same city would be absurd in Central Africa (Maxwell, 1980).

The third possibility would be the most acceptable solution, provided the sponsors of the Rhodesia University were prepared to incorporate in their plans certain essential elements, namely that the University should be multi-racial, autonomous and more appropriately sited (Maxwell, 1980). The Mount Pleasant project was already in progress, although no capital had been expended on building. However, the site was in the suburbs of Salisbury in an area reserved by law for European residents (Maxwell, 1980). However, whereas the Commission regarded the site at Mount Pleasant as ill-placed and too small, the board considered it adequate and well-placed in relation to surrounding facilities (Maxwell, 1980). The fourth possibility seemed the only workable solution, unless the Association's plans could be appropriately modified (Maxwell, 1980).

The Commission did not favour Bulawayo because it was on the south-west boundary of the three territories (Gelfand, 1972). Lusaka, they thought, would be better.

### ***Character Training***

The Commission stressed the importance of character training and so felt that the College should be surrounded by spacious, beautiful grounds and housed in beautiful buildings (Gelfand, 1972). The grandeur of the site and building would serve to remind people of the high aims of a University with its strict standards of scholarship (Gelfand, 1972). It would not be situated in rural surroundings, or in a small town, but should be in touch with a larger population and the industrial life of a city (Gelfand, 1972). The best site would be just outside a city, so that the Africans would not find themselves in a strange environment right in the middle of the city (Gelfand, 1972).

Other members of the Commission noted that, because of their [Whites] fear of being swamped by Africans, it might make it difficult to admit African students in the numbers commensurate with their educational needs (Maxwell, 1980).

According to Maxwell (1980), the report, though presented in February 1953 and stressing the urgency of decision, was not published until May and then with the comment that the Central African governments were in no way committed to acceptance of any of the proposals.

In Southern Rhodesia the Carr-Saunders Commission report placed the sponsors in a difficult position. Most of the members of the Inaugural Board were private individuals representing municipalities or benefactors, and they felt a responsibility to plan within the resources entrusted to them; they saw no justification for altering their plans on the intangible prospect of substantial funds coming from government sources (Maxwell, 1980). In any case, it would take time for the Federal government to be formed and to determine its policy, and the Board felt that only bold and positive action could keep public interest in the University alive (Maxwell, 1980).

### ***Autonomy***

The Commission also recommended that while the Government would be the main contributor, the University authorities had to be quite sure that the

institution was not controlled by any of the Governments. The University was to be fully autonomous. It would be free to spend money, voted as block grants, in any way it chose, just as it would if the income came from private sources (Gelfand, 1972). Each country would make adequate provision for scholarships and bursaries to meet the needs of students. It was also essential that the University had full control over admission of its own students (Gelfand, 1972). Thus the University was launched by compromise between the recommendations of the Carr-Saunders Commission and the original plans of the Rhodesia University Association (Maxwell, 1980).

### ***Rhodesian University Trust Fund***

In 1946 the Southern Rhodesian Legislative Assembly agreed to a motion introduced by Manfred Hodson, as a private member, calling for the immediate establishment of a University in Rhodesia (Atkinson, 1972). As a result of this motion, the Rhodesian University Trust Fund was incorporated by the Governor of Southern Rhodesia during May 1947 (Atkinson, 1972). The Governor appointed the Minister of Internal Affairs (Beadle), the Secretary for Internal Affairs (Cowling) and Hodson as the Trustees of the Rhodesia University Foundation Fund (Gelfand, 1978). This legalised the collection of monies from the public, and placed them in a bank account to be administered on behalf of the future University.

### ***Inaugural Board***

In 1952 Hodson, on behalf of the Rhodesia University Association, proposed a bill in the Legislative Assembly for the incorporation and constitution of the University. This measure authorised the establishment of an Inaugural Board consisting of nine persons elected by donors to University funds, and seven nominated by the Governor and Municipalities of Southern Rhodesia (Atkinson, 1972). The Act was passed on 29 August 1952 and established an Inaugural Board for the University (Mackenzie, 1987). The Trustees of the Rhodesia University Foundation Fund were to account to the Governor for their trust, and then hand over to the Inaugural Board which was to arrange for the construction of University buildings, appoint a Board of Studies from amongst members of the academic staff, and have power to enter into an

arrangement with another University in the British Commonwealth to provide higher education for higher qualifications (Gelfand, 1978).

The University was to consist of a Chancellor (appointed by the Inaugural Board), a Vice-Chancellor (appointed by the Council), a Principal (who would be appointed by the Inaugural Board but eligible for appointment by the Council as Vice-Chancellor), a Council, a Senate, a Convocation, professors, lecturers and registered students of the University (Gelfand, 1978). The government and executive authority of the University was to be vested in the Council. The first Council was to be composed of members of the Inaugural Board holding office immediately before the appointed day and it was to remain in force for three years after the appointment day (Gelfand, 1978). After that, the Council was to consist of a principal (ex-officio), a chairman and vice-chairman, elected from among its members, three to be elected by the Senate and two by the Convocation (Gelfand, 1978).

The Senate would be responsible for the superintendence of instruction in the various departments, lectures and examinations of the University (Gelfand, 1978). The Convocation was to be composed of the principal, professors, lecturers, other teachers of the University and past students.

In anticipation, in order to serve on the Inaugural Board, Hodson resigned from the central Council of the Rhodesia University Association (Gelfand, 1978). The Trust handed over their trust to the Inaugural Board on February 28 1953. The Board announced that the sole test for admission to the University would be educational attainments and good character (Mackenzie, 1987).

The Queen Mother laid the foundation stone on the Mount Pleasant site on 13 July 1953. The 250 acres site had been formally handed over to the Trustees of the Rhodesia University Foundation Fund on 7 September 1950 by the Mayor of Salisbury, Councillor R. M. Cleveland (Gelfand, 1978). On 11 November 1954, the Southern Rhodesian Parliament approved an

amendment to the Land Apportionment Act allowing African members of the College to live on campus (Maxwell, 1980).

### **The Royal Charter**

Imperial and Southern Rhodesian proposals for a University were sealed by a Royal Charter, dated 10 February 1955 under the title 'The University College of Rhodesia and Nyasaland' (Atkinson, 1972). The University College Succession Act (No. 20 of 1955) was passed to repeal the University Charter and Inaugural Board Private Act and to appoint the University of Rhodesia and Nyasaland, incorporated by Royal Charter, as the legal successor of the Inaugural Board (Gelfand, 1978). The new institution was to serve the needs of the people of the Federation, while making use of the property of, and endowments of, the Salisbury Inaugural Board. The Charter accepted the provisions of the Asquith and Carr-Saunders Commissions that:

*...no test of religious belief or profession or race, nationality or class shall be imposed upon or required of any person in order to entitle him to be admitted as a member, professor, teacher, or student of the University College, or to hold office therein, or any advantage or privilege thereof (Hodson, 1955).*

It should be understood that Southern Rhodesian society and administration were under White rule at that time, and the Southern Rhodesian educational system was stratified along racial lines. Thus the Charter's principle of non-racialism ran contrary to the prevailing social and educational circumstances of the nation (Mackenzie, 1987).

The Royal Charter set up the College as an autonomous seat of higher learning in the Federation. A College Council was established to govern the College and any of its powers, or functions, could be delegated to committees or persons thought fit by the Council (Gelfand, 1978). Until 30 June 1955 the Interim Council composed of the Inaugural Board, carried out the function of the permanent Council until it came into existence (Gelfand, 1978). An Academic Board was to be formed; this was to be composed of academic staff and its function was to control, regulate and supervise instruction,

education and research (Gelfand, 1978). The Principal of the College was to be the Chief Academic and Administrative Officer, as well as Chairman of the Academic Board, which comprised the Vice-Principal, the Deans of faculties, all professors and readers, all Heads of academic departments who were not professors or readers, the librarian and such members of staff elected by staff, as determined from time to time by the Council (Gelfand, 1978). Each faculty was to have its Faculty Board and Dean.

At its first meeting on 13 September 1955, according to the statutes, the Permanent Council elected Hodson as its Chairman (Gelfand, 1978). After the granting of the Royal Charter, the Queen Mother was the first President of the University College until 1970.

### **Special Relationship**

One of the recommendations of the Carr-Saunders Commission was that the University College should apply for a 'special relationship' with the University of London. An affiliation of 'special relationship' between the University College and the University of Oxford was suggested from time to time, but the University of Oxford's reply was that the University was 'too far away'. Hodson approached two South African Universities in 1946, but their charters forbade any such relationship (Gelfand, 1978). According to Gelfand (1978), the London degrees were chosen because the other alternative, the University of South Africa (UNISA), no longer had constituent Colleges and only gave external degrees through correspondence courses.

On 19 April 1959 the University Council decided to ask Birmingham University to affiliate the Medical School for an unspecified period, which would be terminated by the College at any time (Gelfand, 1978). This was to enable its degree in Medicine and Surgery to be awarded to the medical students of the College. The agreement was reached in 1960.

### **Setting up of the University College**

In 1953 with support of £1 400 000 from the British Government, the College began to erect most of the buildings – a main teaching block, three halls of

residence (Swinton for women and Manfred Hodson and Carr-Saunders for men), a students' union and houses for members of staff (Atkinson, 1972). Other buildings followed as a result of private donations: the Library (from the Anglo-American Corporation, the British South Africa [BSA] Company and the Rhodesian Selection Trust), the Beit Hall (from the Beit Trust), and the Chapel (from the Dulverton Trust) (Atkinson, 1972).

Early in February 1953 the College administrative office was moved from 115 Baker (now Nelson Mandela) Avenue to its present site in Mount Pleasant (Gelfand, 1978). The Baker Avenue premises had formed the first nucleus of the College. That is where the first teaching, albeit part-time, had taken place (Gelfand, 1978).

Appointments to the academic staff began with the selection of the first Principal of the College – Dr William Rollo, who took up his duties for two years in December 1953 (Gelfand, 1978). He was formerly Professor of Classics at the University of Cape Town, South Africa (Atkinson, 1972). According to Gelfand (1978), Rollo's appointment was a temporary measure designed to give the Board time to look around for a much younger man, who would be able to serve the University for a longer period.

Rollo left on 1 December 1955, and Dr Walter Adams took up responsibilities as Principal of the University College on 1 December 1955. He was Head of the College from December 1955 to mid-December 1966 (Gelfand, 1978). Dr Walter Adams had formerly served as Secretary on the Inter-University Council. His experience proved of considerable value in negotiating the conditions of 'special relationship' with the University of London (Atkinson, 1972). Terence Miller became the next Principal between 1967 and 1969 while Robert Craig took over from 1969 to 1979 (Chideya & Sibanda, 1979).

### **Academic Development**

The University College of Rhodesia and Nyasaland began its career as a teaching institution in March 1957. It began with an enrolment of 68 students and with teaching facilities limited to subjects within the Faculties of Arts,



Science and Education (Morris, 1964). Between 1961 and 1980 five new faculties were established – Medicine in 1963, Engineering in 1974, Agriculture in 1980, Commerce and Law in 1980 and Veterinary Science in 1980 (Mackenzie, 1987). Some of the faculties were styled as post-independence (1980) developments. According to Mackenzie (1987), this was not the case, for example in the case of Veterinary Science, plans for the new faculty were finalised in November 1979 following the survey and report on the need for such a faculty by Professor Emeritus Sir Alexander Robertson of Edinburgh University (Mackenzie, 1987).

Further, between 1963 and 1980 a number of new subjects and departments were created – Land Management, Linguistics, Theology, Philosophy, Accountancy, Business Studies, Pharmacy, Psychiatry, Geography, Mining Research, and Computing (Mackenzie, 1987). Between 1957 and 1979 over 5 500 degrees, certificates and diplomas of the Universities of London, Birmingham and Rhodesia were awarded by the institution in Salisbury (Mackenzie, 1987). Taking into account a further 3 000 Certificates in Education (Primary), awarded through the University's associate teachers' Colleges (Bulawayo, Gwelo, Mkoba), this brings the sum total of graduates and diplomats to over 8 500 (Mackenzie, 1987). Below is information on full-time student enrolment at the University College between 1957 and 1979.

**Table 2.1: Full-time Student Enrolment at the University College**

Date	Africans	Europeans	Others	Total
1957	8	59	1	68
1958	19	101	4	124
1959	32	132	2	166
1960	49	153	6	208
1961	64	173	11	248
1962	74	241	15	330
1963	159	309	20	499
1964	144	378	29	551
1965	174	455	43	672
1966	196	465	57	718
1967	211	432	74	717
1968	327	479	88	894
1969	303	463	80	846
1970	363	489	85	937
1971	407	510	76	993
1972	384	517	66	967
1973	417	586	73	1076
1974**	—	—	—	—
1975	561	707	95	1361
1976	727	666	113	1506
1977	998	1012	120	2130
1978	1266	916	121	2303
1979	1128*	697	106	1931

\*Figures depressed by African male call-ups to military service.

\*\*There are no figures for 1974.

**Source:** Compiled from Maxwell (1980, p. 262); Chideya and Sibanda (1979, p. 10); and Mlambo (1995, p. 482).

Although the enrolment of students at the University College of Rhodesia and Nyasaland continued to show an upward trend during the years as shown in Table 2.1 above, very large numbers of students were attracted to Universities elsewhere. In particular, South African Universities continued to attract large numbers of Rhodesian students. For example in 1964 there were 1 072 European students attending the Universities of Cape Town, Rhodes, Witwatersrand and Natal, as compared with a total of 551 students of all races engaged in full-time study at the University College (Report, 1964). Similarly, in 1967, 1 362 students were attending the Universities of Cape

Town, Rhodes, Witwatersrand and Natal while 717 were at the University College (Report, 1967).

### **Federation**

The Federation of the Rhodesias and Nyasaland came into being in October 1953. There was much talk about partnership between the races. However, there was mounting dissatisfaction in Northern Rhodesia and Nyasaland regarding the sharing of the fruits of the Federation. Britain eventually conceded constitutions, which brought African Governments to power in Nyasaland (1961) and Northern Rhodesia (1962) (Maxwell, 1980). According to Maxwell (1980), in Nyasaland, Federation appeared as the creature of White domination, with Southern Rhodesia the chief beneficiary and Salisbury, where the University College was located, the seat of power.

### ***Dissolution of the Federation***

The dissolution of the Federation on 31 December 1963 confronted the College with grave questions about its future. Was the College to remain a place of higher education for all three territories of British Central Africa or simply tied to the communities of Southern Rhodesia alone? (Atkinson, 1972). Its recurrent income had come from the Federal government, and now this no longer existed (Maxwell, 1980). According to Maxwell (1980), Northern Rhodesia and Nyasaland could not be expected to support a College outside their own boundaries. The College could not rely on support from overseas – the British Government froze any funding to the College (Maxwell, 1980). Foreign donors, hitherto attracted towards the College as an institution promoting genuine racial partnership within the Federation, were unlikely to help further if it served an increasingly reactionary Southern Rhodesia alone (Maxwell, 1980).

However, after discussions between British and Southern Rhodesian government representatives in April 1964, in June that year the British Government agreed to contribute £750 000 towards meeting the recurrent expenses of the College in the period up to 1967, a capital grant of £800 000 towards the cost of building a teaching hospital and a further grant of £300

000 towards general capital expenditure (Maxwell, 1980). The Southern Rhodesian Government accepted the responsibility for securing the substantial balances of both capital and recurrent costs necessary (Maxwell, 1980). Thus, inescapably, the University College was to fall more and more into the role of a national University institution for Southern Rhodesian social and economic life (Atkinson, 1972).

### **Morris Review Commission**

The University College was relieved of anxieties regarding its financial situation. It then set on reviewing the development needs of the College. In August 1964 the Southern Rhodesian Government appointed a Review Commission to recommend the principles upon which the College could be developed, the range of courses to be offered, any changes which might take place and how these might affect postgraduate work and research (Gelfand, 1978). The Medical School did not come within its scope. The Chairman of the Commission was Sir Charles Morris (Chairman of the Inter-University Council of Higher Education Overseas and formerly Vice-Chancellor of the University of Leeds) (Gelfand, 1978).

The report of the Commission was presented to the Rhodesian Legislative Assembly on 25 February 1965. Gelfand (1978) asserts that the report contained much that was contrary to the views of the Principal. The Commission considered the College fit for independent University status, equal to any University in any country. It was concerned about the shortage of high-level manpower in Rhodesia. It stated that, while the education system could only produce about 70 000 such people, 100 000 were required and so the country was short of professional and other executives, as well as skilled personnel (Gelfand, 1978).

The Commission advocated for the termination of the 'special relationship' with London, arguing that other Colleges that had had this link had withdrawn from it even after a shorter period of connection (Gelfand, 1978). It agreed that the standards of the College were high, its reputation good and that satisfactory research was being done (Gelfand, 1978). It said that the link

with London was useful for taking of higher degrees – a need that seldom arose. The Commission saw the participation of external examiners as essential, but it felt that this could take place outside the special relationship. If necessary, it argued, supervision could be found and overseas examiners procured (Gelfand, 1978). It recommended that the time had come for the College to experiment with many different types of courses and degrees.

The Commission also believed that the medical relationship with Birmingham University in Britain, which had recently been established, should be retained. It did not consider Theology necessary, but thought Classics might continue (Gelfand, 1978).

The Commission concluded that the University College had come of age and that it should seek the full status of an independent University, while being flexible in its arrangements to meet the special needs of a country whose economy and social structure were in many ways unique (Morris, 1964).

Dr Walter Adams, Principal of the University College, did not agree with this report. He considered that special relations with London should be maintained, because the involvement of London was the bulwark in its defence against encroachment on its autonomy in a difficult political setting (Maxwell, 1980). Professor Craig felt that Theology was not less important than some other subjects, as it could prepare students for the ministry and for teaching religion in schools (Gelfand, 1978). A memorandum prepared by the Academic Board criticised the Morris Commission severely, noting factual errors in the report.

### **Unilateral Declaration of Independence**

As if the collapse of the Federation was not enough, the political landscape in Rhodesia was changed with the declaration of independence by the Smith-led government in November 1965. The Rhodesian Front Government campaigned for independence on the basis of the 1961 Constitution, and led to a worsening of relations between Rhodesia and the United Kingdom (Atkinson, 1972). Ian Smith, Prime Minister of Rhodesia, failed to reach

agreement with successive Conservative and Labour administrations in the United Kingdom and, on the 11<sup>th</sup> November 1965, he made a Unilateral Declaration of Independence (UDI). Rhodesia was subjected to economic sanctions, and this added to the financial uncertainty already existing at the College. The College was now dependent on the Southern Rhodesian Government for practically all its finance (Gelfand, 1978). Many believed that this signaled the end of the University College of Rhodesia at Salisbury as a multi-racial institution (Stanley, 1970). The new government swiftly arrested nine University College lecturers, and imprisoned and deported them without trial for their criticism of the White, minority government (Stanley, 1970). Smith displaced the Academic Board which awarded scholarships with a Committee of picked civil servants (Stanley, 1970).

Mackenzie (1987) suggests that the University played a role in the survival of the Smith government, by providing a constant stream of well-trained graduates and diplomats in most of the professional, commercial and industrial areas vital to the survival of White Rhodesian society.

The task before Dr Adams was how to maintain the autonomy of the College and keep the Charter intact, without losing its financial support (Gelfand, 1978). Those who demanded public opposition to the Government felt that the College should be closed, because the Charter could not be maintained in a hostile climate (Gelfand, 1978). They felt that their academic freedom was under threat and that a free University could not exist in such a political climate. They considered that a multi-racial University would be looked upon as a credit to the Government and enhance its reputation (Gelfand, 1978). Others felt that it was embarrassing to take money from an illegal regime, and that the British Government should be made aware of this effect of its withdrawal of its financial support (Gelfand, 1978).

The Principal, Dr Adams, and a large number of staff felt that there was need to keep the College alive and multi-racial, and keep its Charter and academic freedom intact (Gelfand, 1978). They believed that the College was the last stand of the concept of a non-racial society – it was the only chance for higher

education for African students, and therefore it had to continue to function (Gelfand, 1978).

The Rhodesia Front Government sought to encourage separation between African and non-African racial groups (Atkinson, 1972). The country was cut off from many sources of assistance from abroad, and there was political controversy among different racial groups (Atkinson, 1972).

Amongst the African students during this period, there was the fear that, if the College closed, very few would find places elsewhere (Gelfand, 1978). They felt that the University was a British one, and that Britain should support them against UDI (Gelfand, 1978). However, it should be remembered that the greater part of the recurrent finance of the College came from the Rhodesian Government, and so the College could remain without money from overseas (Gelfand, 1978). There were also worries about the career prospects of those who graduated from the University College. The official policy of the Rhodesian Front Government was racial separation, which restricted opportunities for Africans in government service except in teaching (Atkinson, 1972). Also future generations of Africans and non-Africans alike were likely to be concerned with the acceptability of the University College degrees in other parts of the world (Atkinson, 1972).

According to Gelfand (1978), the UDI, at the end of 1965, created no violent reactions amongst African students mainly because of their dispersal immediately after the examinations. However, in subsequent years the situation was exacerbated by a series of political and racial upsets. In order to fully appreciate the events of 1966 and later, an exposition of the racial polarisation that had engulfed the institution from its inception is imperative.

### **Racial Polarisation and Student Activism**

According to Gelfand (1978), right from the start the College was thought of as a British-type University with a Western culture. Therefore, all who came there were automatically expected to conform to British standards. When it first began, a brochure was issued, giving its history and the significance of

the Charter (Gelfand, 1978). Under entrance qualifications, it stressed the importance of Western culture. The following quotation exemplifies this thinking:

*Europeans have brought to the Federation the Western way of life, based on Christian culture. It is essential that this way of life be maintained and disseminated among all races in the Federation... Hence entrance to the University, where the European way of life is studied and taught in the highest degree, must be for those who can justify their presence there, that is there must be no lowering of entrance standards below those obtaining for Europeans elsewhere (University College of Rhodesia & Nyasaland, nd).*

In advocating for a federal University with a College for each of the two major races during the formation years of the University College, Hodson had said that the majority of European students would refuse to attend a University swamped by African students, as their backwardness would inevitably lower its standards (Gelfand, 1978). Africans were not asked what kind of a University they would like; it was taken for granted that they wished for a Western-type institution (Gelfand, 1978).

As Gelfand (1978) argues, many of the Africans came from rural districts, where they had been educated in mission schools, and had obtained their A-levels at Government schools. Secondary schooling for Africans was still in its infancy, and not as highly geared as that for Europeans. In any case few of the Africans had any money of their own, and practically all depended on the scholarships, grants, bursaries and loans given to them to help them through College (Gelfand, 1978).

The University College was virtually the only place in Southern Rhodesia, apart from the missions, where Europeans and Africans could enjoy social relations together, and for most of the European students it was a new experience to find themselves in the company of Africans as fellow-students rather than as family servants (Maxwell, 1980).



In the early days, a few incidents of racism occurred. When the College opened in March 1957, there were 68 students – 8 were African, one of them a woman (Gelfand, 1978). Fifty-three students lived in the halls of residence – 8 Africans and 45 Europeans (Gelfand, 1978). The rest stayed outside campus, mainly in their homes. Manfred Hodson Hall was for White students, Carr-Saunders for non-White males, and Swinton for European girls (Gelfand, 1978). Gelfand (1972) argues that, in spite of this segregation, the students all mixed well, probably because of the small numbers.

As the numbers of both races increased in the College, the White racial group grew and by 1964 very few African men could mix with or even talk to a European girl without some risk of resentment and them being made to feel uncomfortable (Gelfand, 1978). A Black man and a White girl would have found it uncomfortable to sit together at a table for a meal at Manfred Hodson, but not at Carr-Saunders (Gelfand, 1978). There were instances of friendship between the races which, however, led to trouble with the European parents (Gelfand, 1978).

By the early 1960s, African students were feeling that they were tolerated rather than accepted by many of the Europeans (Gelfand, 1978). There was no free discussion between the races. Africans complained that student affairs were being mismanaged, that they could not attend meetings and refused to recognise the Students' Union Council as the official organ of the student body (Gelfand, 1978). Some wished to withdraw from the Students' Union to form one of their own (Gelfand, 1978). In 1962 a new constitution divided the Students' Union into two councils, separating the administrative from the representative aspects of the Union (Gelfand, 1978).

Gelfand (1978) claims that most of the racial conflict at the College was due to outside political events – the African nationalist struggle against the Federation and then against UDI. In September 1957 the Southern Rhodesia African National Congress was formed, only to be banned in February 1959 (Gelfand, 1978). Students could not remain unaffected by these events or the riots that took place in various parts of the country during this period (Gelfand,

1978). Thus on 10 October 1960, all African students at the College took part in a total hunger strike in sympathy with their people who had been killed in a disturbance in Harare Township (Gelfand, 1978). This strike did not arouse much public comment. Most African students supported the Zimbabwe African Peoples' Union (ZAPU) until 1963, when, after a split, many became more attached to the Zimbabwe African National Union (ZANU) (Gelfand, 1978). Officials of both parties came to the College to lecture to the Current Affairs Society to which many, mostly Africans belonged.

Further, racial tensions developed as a result of the Rhodesia Front's policy of moving towards clearer lines of demarcation between racial groups under their control (Atkinson, 1972). Atkinson (1972) points out that a new constitution, based on the recommendations of a Constitutional Commission appointed during 1968, was approved by an overwhelming majority of the electorate in a referendum on 20 June 1969. It provided for an independent Rhodesian republic, with legislature composed of the representatives of the different racial groups in proportion to the amount they paid in taxes (Atkinson 1972). This device was designed to preserve White supremacy into the foreseeable future.

### **Demonstrations**

The first demonstration at the College took place in June 1962 against the Portuguese Governor-General who was visiting the College that day (Gelfand, 1978). It was organised to protest against the lack of academic freedom in Portugal, and in Portuguese East- and West African Universities (Gelfand, 1978). Over 20 students of both races, mostly African, stationed themselves on the road outside the Principal's drive and waited with placards for the Governor-General (Gelfand, 1978).

The next major demonstration was the one against Lord Salisbury on 5 April 1963. He had been invited by the Federal Government to lay the foundation stone of what was going to be the teaching hospital of the Medical School that had just been opened (Gelfand, 1978). Lord Salisbury's right wing

sympathies, as articulated in his parliamentary speeches in the British Hansard, were well known.

According to Gelfand (1978), when the 1966 session opened, feelings were so strong that it needed but a match to light the fire and this was struck by the Principal's letter at the beginning of March. It contained a statement by the College Council, pointing out that student behaviour on and off campus was a matter for College discipline (Gelfand, 1978). This meant that political activities outside the College might easily be construed as bad behaviour, and perhaps, cause the loss of Government grants (Gelfand, 1978). The letter also gave the Student Union new powers to issue formal warnings to students and to penalise them for small offences, such as damage to Students' Union property (Gelfand, 1978). This came at a most inopportune time.

According to Atkinson (1972), on the morning of 17 March 1966, some 230 students, mostly Africans, boycotted lectures and staged a series of noisy demonstrations around the campus. On the next day, police were summoned to break up a mob of demonstrating students who had refused to disperse on the order of the Principal, Dr Walter Adams (Atkinson, 1972). The executive committee of the College took advantage of the situation to announce an investigation into the causes of the events which took place at the College in March and other matters. An independent commissioner, Sir Robert Birley, former headmaster of Eaton in Britain, and at that time current visiting Professor of Education at the University of the Witwatersrand (South Africa), was selected (Atkinson, 1972).

### **Birley's Report**

Professor Birley's report, which was presented within a fortnight of the day when he first began to hear evidence, was severely critical of both the administration of the University College, and the general climate of political opinion in Rhodesia (Atkinson, 1972). In his recommendations, Birley stated that there were grave faults in the administrative structure of the College. The Principal had taken too much authority into his own hands and had become aloof, as was illustrated in sections of Birley's report:

*The Principal takes too much into his own hands. I do not think it is difficult to see how this has happened. The Principal has been here since the College first took in students and in those days it was something like a large family which he had to look after very largely by himself ... But now it is a University College of over 700 students ... I am convinced that he must delegate some of the work he does now. It cannot be the right for the Principal of a University College of over 700 students to spend his time deciding on the allotment of places in the halls of residence to students or of vacant flats to members of the staff (Birley, 1966, p. 41).*

In his report there were criticisms and complaints about delays in getting decisions and acknowledgements of letters. The failure to call the Promotions Committee for the whole of 1965 had caused great resentment (Birley, 1966). One Professor stated that he made 18 requests for the advertisement of a vacant chair in his Faculty, and it was only at the 19<sup>th</sup> that it was advertised (Birley, 1966). Birley (1966) recommended that immediate steps be taken to secure the services of someone engaged in the administration of an English University to come out to the College and make a thorough survey of the Administration and make recommendations for improvement.

Birley did not take the view that the College should be closed. Gelfand (1978) contends that the rising consciousness of African students against the ruling Government in office at the time was largely allowed to pass unrecognised and hardly commented on.

Professor Terence Miller replaced Dr Walter Adams as Principal in 1968. Atkinson (1972) claims that Miller was known for speaking his mind. In the course of a speech to the Salisbury Chamber of Industries in March 1969, he scolded Rhodesian employers for a failure to open up opportunities for careers to educated Africans (Atkinson, 1972). In response to Miller's position on issues of race, one White Rhodesian allegedly retorted:

*Mr. Miller has made more than enough inflammatory statements in this country. I have always been led to believe that some of the finest breeding-*

*grounds for extreme Socialism and Communism are to be found among our higher intellects at the University (Atkinson, 1972, p. 159).*

These considerations eventually drove Miller to resign from office. "I believe", he wrote to the chairman of the College Council,

*... that the prospect before UCR is now likely to be that of a University in enemy-occupied territory. The Head of the University will be expected to collaborate with the 'occupying power' in policies and projects which cannot be isolated from underlying wider principles and assumptions that he must in his heart, condemn (Atkinson, 1972, p. 161).*

Thus the acceptance of the republican constitution in 1969, and the resignation of Principal Miller, meant that the University College's links with academic life in the United Kingdom was progressively weakened, while its dependence on local support was emphasised more and more (Atkinson, 1972).

The autonomy of the University College had not yet been seriously endangered. Its relationship with two major British Universities and the presence of British representatives on the College Council implied a measure of protection which could not easily be ignored. However, a third crisis, developing early in 1970, was the direct result of grave and far-reaching controversies concerning the constitutional status of the College in the future. This time pressures came, not only from within Rhodesia, but also from outside, in the form of demands by sections of opinion within the Universities of London and Birmingham for a severing of relations with the University College.

### **Severing of Special Relations**

During the autumn of 1969 there were a series of demonstrations by London University students, which were aimed at bringing the agreement of special relationship with the Rhodesian institution to an end (Atkinson, 1972). Similar action was taken by Birmingham students during the following March, in an

attempt to influence the outcome of protracted negotiations concerning the future of the Medical School in Salisbury (Atkinson, 1972). Atkinson (1972) argues that these students were concerned about the fate of African fellow-students under an increasingly racist form of government, and that they were anxious to obtain concrete assurances that multi-racial facilities would be preserved intact. He further argues that the resignation of Professor Miller from the principalship reinforced their case – it implied little hope of maintaining the College's autonomy in the future (Atkinson, 1972).

Authorities of either British University realised that future relations with the Rhodesian institution would be marked by an increasing measure of embarrassment and irritation, which might well make complete separation unavoidable (Atkinson, 1972). Atkinson (1972) suggests that it was apparently in an effort to forestall such an eventuality that the College authorities decided to begin a programme of disengagement on their own account. In any case, the scheme of special relationship, as envisaged in the Asquith Report, had never been intended as more than a transitory arrangement to allow overseas University institutions an opportunity to establish their own academic prestige (Atkinson, 1972).

According to Atkinson (1972), the period of sponsorship already enjoyed by the University College of Rhodesia – fourteen years – was considerably longer than that maintained by London University with many other overseas institutions [London University had maintained special relationship with University institutions in Khartoum (1948-56); Ghana (1948-59); Ibadan (1949-62); the West Indies (1949-62); Makerere (1949-63); Nairobi (1961-3) and Dar es Salaam (1961-3)] (Atkinson, 1972). The sponsorship had apparently been extended partly because of the College's aim of achieving academic standards comparable to those of Universities in the United Kingdom, and partly because of the need for support in the midst of a rapidly escalating political crisis (Atkinson, 1972).

It was arranged that students entering the University College during 1970 would be the last to be permitted to take London University qualifications.

Thereafter students would take qualifications of the University of Rhodesia. In 1969, the College changed its title to the University College of Rhodesia (UCR). In December 1969, Council decided to work for full University status by 1 January 1971 (Maxwell, 1980).

In early March 1970 the College's first President, the Queen Mother, resigned. Her resignation was justified by the reason that the College had now reached maturity as an academic institution. However, it made clear that the University of Rhodesia would be required to operate without any further support from the Crown, or from Her Majesty's Ministers in the United Kingdom (Atkinson, 1972).

As shown in this Chapter in Table 2.1 above, in 1973 African students comprised a mere 40% of the entire University student body, even though Africans outnumbered Whites in the country 20 to 1 (Mlambo, 1995). According to Mlambo (1995), African students resented the University's discriminatory policy of restricting African students' course and subject choices. For example, African students were discouraged from taking science subjects and economics (Mlambo, 1995). They were 'persuaded' to take only 'teaching subjects', since employment opportunities for African graduates outside teaching in African secondary schools, were severely limited (Mlambo, 1995). African students who persisted in taking such subjects, against the 'advice' of the University authorities, often encountered discrimination in the classroom and in the marking of their assignments.

Figure 2.1 below shows the key events in the history of the University of Rhodesia.

**Figure 2.1: History of the University of Rhodesia: Key Events**

**1943:** Asquith Commission

**1943:** Kapnek offers £20 000 to the Southern Rhodesia Government to build a University

**1945:** Friends of the University of Southern Rhodesia

**1946:** Inter-University Council for Higher Education

**1947:** Rhodesia University Association

**1949:** Cartmel-Robinson Committee

**1952:** Carr-Saunders Commission

**1952:** University College Inaugural Board

**1953:** Federation of Rhodesia and Nyasaland

**1955:** The Royal Charter – Setting up the College

**1964:** Morris Review Commission

**1965:** Unilateral Declaration of Independence

**1966:** Birley's Report

**1971:** University College acquires full University status

**1980:** University of Rhodesia changes its name to the University of Zimbabwe

**Source:** Author

**Conclusion**

This chapter looked at the history of the University of Rhodesia, from the 1940s when the idea of a University was mooted up to the late 1970s when relations with London were severed and the liberation war began to have a negative effect on the University. At independence in 1980, the University of Rhodesia changed its name to the University of Zimbabwe. The next chapter reviews literature on the resource-based view of the firm (RBV) concept and that of path dependency.



## **CHAPTER 3: LITERATURE REVIEW**

### **Purpose of the Literature Review**

Cavana, Delahaye and Sekaran (2001) state that a review of literature in scientific research serves the following purposes:

- The literature review ensures that important variables that are likely to influence the problem situation are not left out of the study.
- It ensures that a researcher does not ‘reinvent the wheel’ by expending time and effort on something that has already been thoroughly researched.
- It facilitates the integration of information that has been gathered from inside the organization with what is found in previous studies.
- From a review of literature, a clear idea emerges as to what variables would be most important to consider (parsimony). Thus the literature review provides the foundation for developing a comprehensive conceptual or theoretical framework from which research objectives can be developed for testing.
- From the literature review, the statement of the research problem can be made with precision and clarity.

With the above justifications for the need for a review of literature, this chapter attempts to acquaint the reader with relevant research work carried out in the areas of the resource-based view of the firm (RBV) in general, and path dependency in particular.

### **Industrial Organisation Economics (IO)**

It can be reasonably claimed that seeking the source of sustainable competitive advantage (SCA) is one of the dominant areas of research in the field of strategic management. According to Cockburn, Henderson and Stern (2000), throughout the 1960s and 1970s the study of ‘strategy’ was the study of what general managers or ‘leaders’ should do. The 1980s to 1990s witnessed an explosion of powerful frameworks for evaluating the determinants of differential firm performance. In this regard, two research

streams have dominated the theoretical treatment of strategic management. The first, which is based on an economic heritage, is known as industrial organisation (IO) economics. IO economics is based on the structure-conduct-performance paradigm, which holds that the structure of an industry determines the state of competition within that industry and sets the context for companies' conduct (Collis & Montgomery, 1995). According to Spanos and Lioukas (2001), the IO economics perspective, as encapsulated in Porter's five forces framework (Porter, 1979), assumes that firms are identical in terms of access to strategically relevant resources. In this regard, any attempt to develop resource heterogeneity has no long-term, competitive advantage viability due to the high mobility of strategic resources among firms.

According to Black and Boal (1994), Porter's (1985) competitive forces framework, which has its roots in the IO paradigm, has provided many useful insights to researchers and practitioners by concentrating on the external side of the analysis. It sees the strategic problem in terms of industry structure, entry deterrence, and positioning (Teece, Pisano & Shuen, 1997). Its main contribution has been that industry attractiveness is the primary basis for superior profitability:

*... the implication being that strategic management is concerned primarily with seeking favourable industry environments, locating attractive segments and strategic groups within industries, and moderating competitive pressures by influencing industry structure and competitors' behaviour (Grant, 1991, p. 117).*

Superior performance is seen as a function of a firm's membership in an industry that has an attractive structure relative to other industries. According to Spanos and Lioukas (2001), within this framework, the firm is viewed as a bundle of strategic activities aiming at adapting to the industry environment by seeking an attractive position in the market area. Strategy is thus based upon identifying whether an industry is attractive or not, and then determining the viability of a potential competitive position within the external constraints

imposed by industry structure. IO views the sources of profitability to be the characteristics of the industry, as well as the firm's position within the industry (Amit & Schoemaker, 1993).

The other perspective is known as the resource-based view of the firm (RBV). The RBV advances alternative assumptions, i.e., firms may actually be heterogeneous in relation to resources and ensuing capabilities, on which they base their competitive strategies. In addition, these resources and capabilities may not be perfectly mobile across firms, resulting in further heterogeneity among industry participants (Spanos & Lioukas, 2001). As a result of such positing, the field of strategic management has thus undergone a major shift in focus regarding the sources of sustainable competitive advantage (SCA).

### **Criticism of Industrial Organisation Economics**

The competitive forces framework, as an encapsulation of the IO paradigm, has been criticised on several fronts. Black and Boal (1994, p. 131) argue that the framework runs the risk of being tautological, i.e., "firms in attractive industries are successful. They are successful because they are in attractive industries". Black and Boal (1994, p. 131) posit that the five forces framework "does not address why some firms are able to get into advantageous positions in the first place, and why some firms are able to sustain these positions and others not". The framework also influences managers to expend resources on influencing the industry's structure even though their firm will not uniquely benefit from the changes, allowing competitors to free ride on the firm's expenditures (Black & Boal, 1994).

Criticism against IO thinking and approaches also mounted in light of empirical evidence pointing to some firms being more profitable than others, regardless of whether the average profitability of the industry was high or low. According to Cockburn *et al.* (2000, p. 1127), there was "no compelling quantitative evidence showing that firms in which senior management actively used analytical tools to understand industry structure outperformed those that did not". However, the use of the IO framework meant that for some time, the

link between strategy and the firm's resources and skills suffered comparative neglect (Grant, 1991).

Researchers then directed their efforts at finding answers to the question as to what accounts for some firms being more profitable than others, regardless of whether the average profitability of the industry was high or low. The point that factors internal to the firm could account for that variance was mooted. Considerable interest shifted to the presence of firm-level resources as a possible explanation for why some firms, within a particular industry or sector, perform better than others. Many began to argue that "strategy formulation starts properly, not with an assessment of the organization's external environment, but with an assessment of the organization's resources, capabilities, and core competencies" (Black & Boal, 1994, p. 132). Grant's (1991, p. 116) contribution in this regard is illustrative:

*... an externally focused orientation does not provide a secure foundation for formulating long-term strategy. When the external environment is in a state of flux, the firm's own resources and capabilities may be a much more stable basis on which to define its identity.*

Rumelt's (1991, p. 167) comment is poignant: "... industry may not be the most useful unit of analysis". Barney (1986) adds a voice to this new thinking by advising firms to turn inwardly, and analyse information about assets a firm already controls. In advocating a new methodology, Barney (1986, p. 1238) argues that:

*... environmental analysis seems less likely to systematically generate the expectational advantages needed to obtain expected above normal returns ... because firms applying approximately the same publicly available methodology to the analysis of the same environment will collect about the same information.*

Amit and Schoemaker (1993) agree that industry analysis excels in assessing the profit potential of various industry participants by focusing on the external

competitive forces and barriers that prevail in different product/market segments. However, it treats the firm largely as a black box, while de-emphasizing the role of managerial discretion (Amit & Schoemaker, 1993).

Peteraf (2003, p. 312) sees RBT (resource based theory), an alternative term for the RBV, as a complementary theoretical framework, rather than a replacement of industry analytical tools:

*RBT (resource based theory) is not a substitute for industry-level analytic tools, such as 5-forces analysis (Porter, 1980). It is not a substitute for strategic group analysis or for analysis of the macro environment. Rather, it is a complement to these tools.*

### **Reconciling IO Economics and RBV Perspectives**

In their effort to reconcile competing perspectives on the origins of competitive advantage, Cockburn *et al.* (2000, p. 1127) agree with Peteraf (2003):

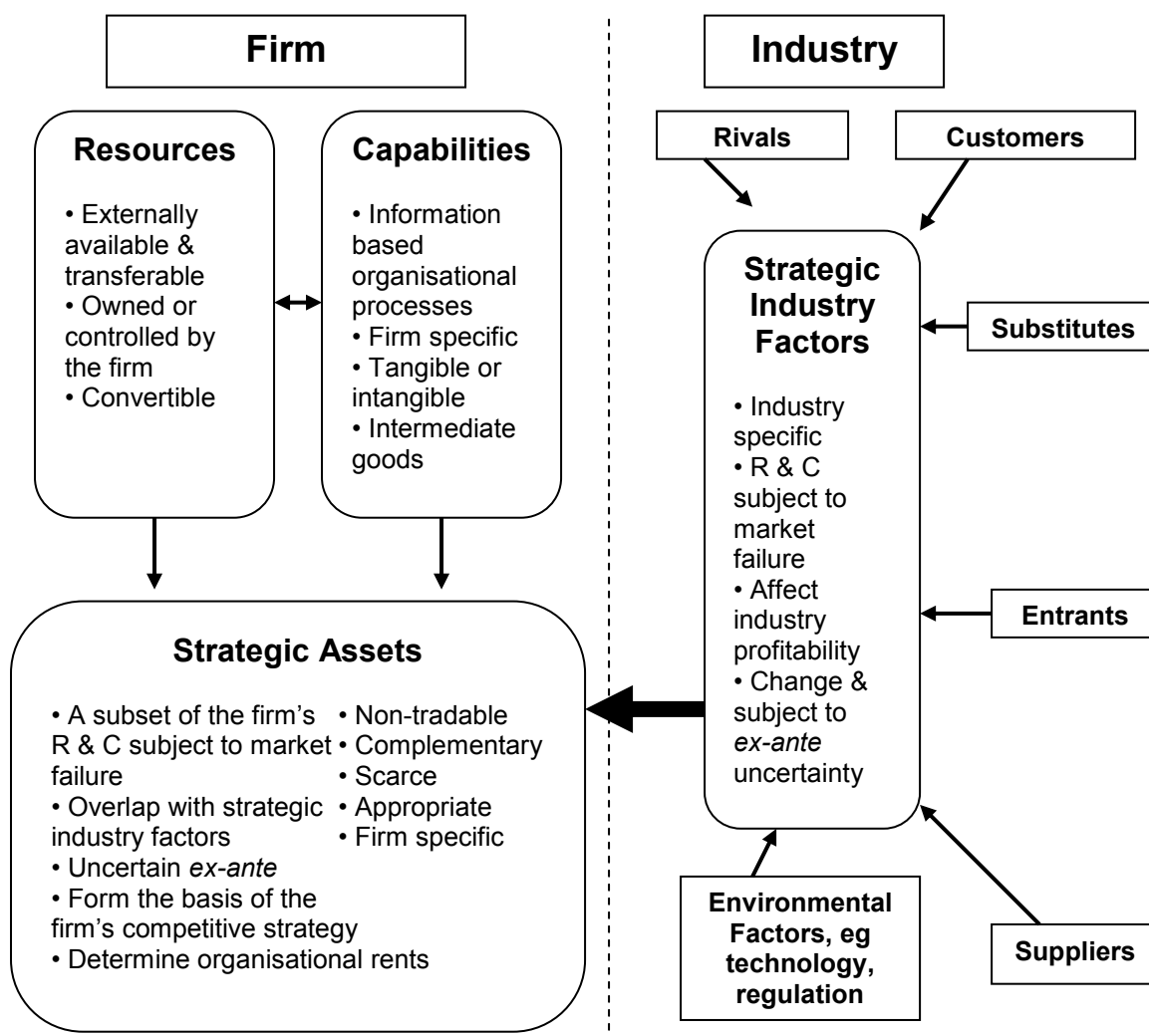
*... the RBV is often positioned as an 'alternative' to the environmental perspective ... such a positioning reflects a significant misconception, since the RBV and the environmental perspective are complementary in many important ways.*

According to Spanos and Lioukas (2001, p. 911), "Besides the apparent conflicting views between the two perspectives outlined above, in reality both can co-exist and shape actual firm behaviour". The two perspectives are complementary as explicants of firms' performance in the sense that, by drawing insights from both, one can gain a more balanced view on the sources of competitive advantage (Spanos & Lioukas, 2001). Spanos and Lioukas (2001) argue that both perspectives seek to explain the same phenomenon of interest (i.e., sustainable competitive advantage) and the unit of analysis is identical in both cases (i.e., the firm). However, this should not distract from the fact that the two perspectives draw from two different, even antagonistic, theoretical traditions.

In support of the above argument, Cockburn *et al.* (2000) suggest that, after all, both literatures offer a similar theory about the process of strategic choice. In this regard, the RBV attempts to bridge the gap between theories of internal organisational capabilities on the one hand, and external competitive strategy theories on the other hand. According to Spanos and Lioukas (2001), whilst the IO economics perspective underlines a market power imperative, the RBV is fundamentally concerned with efficiency.

### **The Resource-Based View of the Firm (RBV)**

As discussed above, during the 1980s and 1990s the dissatisfaction of theorists with the IO framework led to the emergence of the RBV as an alternative analytical tool. A growing body of literature began to point to the importance of firm-specific factors in explaining variations in economic rent (Amit & Schoemaker, 1993). The RBV switched the focus from the external environment, typified by Porter's paradigm (1980; 1985), to internal resources and capabilities. Its principal contribution has been a theory of competitive advantage. It explains that long-lived differences in firm profitability cannot be attributed to differences in industry conditions alone. Rather, it focuses on strategies for exploiting existing firm-specific assets. Thus, while IO theory looks outside the firm to explain sustained superior performance, the source of rents according to the resource perspective is internal (Amit & Schoemaker, 1993). The RBV has generated a productive dialogue among previously isolated perspectives. Figure 3.1 below summarises the relationship between industry determined strategic industry factors and firm level resources, capabilities and strategic assets.

**Figure 3.1: Strategic Industry Factors Versus Firm Level Resources**

**Source:** Adapted from Amit and Schoemaker (1993).

Early attempts to explain firm performance from the perspective of resources (Penrose, 1959) were rekindled by Barney (1991), Wernerfelt (1984), Grant (1991) and Rumelt (1984). These papers led to the emergence of the RBV, which has now become the dominant and popular approach in the study of the conceptualisation of competitive advantage at the level of the firm. The lineage of the RBV can therefore be traced back over four decades and it has received attention in recent years. It has established a foothold in the strategic management literature by becoming one of the most influential frameworks in this area. The importance of this new direction in strategy research is reflected by the fact that, in 1994, Wernerfelt's article was awarded the *Strategic Management Journal's* best paper prize for reasons

such as being “truly seminal”, and an “early statement of an important trend in this field” (Zajac, 1995, p. 169). Some of the commentary read as follows: “Very instrumental in creating the research agenda for resource-based studies” (Zajac, 1995, p. 169).

Until the late 1980s, the RBV was characterised by a rather fragmented process of development (Fahy, 2000). The earliest acknowledgement of the potential importance for firm-specific resources is to be found in the work of economists such as Chamberlin and Robinson (Chamberlin, 1933; Robinson, 1933). Chamberlin (1933) argues for the consideration of a firm’s unique assets and capabilities. The above works were subsequently further developed by Penrose (1959). Andrews’s (1971) framework, about what a firm *can* do (strengths and weaknesses) and what *it might* do (opportunities and threats), dominated the field of strategy for much of the 1970s and 1980s (April & Shockley, 2005). In the 1980s, Porter (1985) revised the traditional IO view by introducing the value chain framework, which stated that sources of competitive advantage are not only from the external environment but also from the internal characteristics of the firm.

By the mid-1990s, the RBV had assumed centre stage in the strategic management literature. Its key proposition is that differences in firm strategy and performance are primarily driven by unique resources and capabilities that a firm possesses, or in the way in which these resources and capabilities are combined and utilised (Penrose, 1959; April & Craddock, 2000). However, in the early contributions, there was no explicit distinction between resources and capabilities.

The resource-based view of the firm acknowledges the importance of company-specific resources and competencies, i.e., the roots of competitive advantage are inside the organisation rather than outside (Collis & Montgomery, 1995). It is not about reviewing the attractiveness of entire industries, and their profit and growth potential for new entrants. It is about what individual firms can do to understand themselves better (April, 2002; April & Shockley, 2005). The RBV focuses on the heterogeneity of firms, their



varying degrees of specialisation, and the limited transferability of corporate resources (Amit & Schoemaker, 1993).

## **Types of Resources**

### ***Tangible and Intangible Resources***

As discussed above, the RBV perspective charts a new direction in the field of strategic management and so a succinct encapsulation of the basic ideals embedded in the theory is in order. According to the RBV theory, there are three types of resources, namely tangible and intangible resources and organisational capabilities (Barney, 1991). Resources in, and of, themselves do not confer a sustainable competitive advantage. Managers have to convert resources into something of value to customers. Tangible resources include plant, equipment, raw materials and bank deposits (Collis & Montgomery, 1995). They are rarely a source of sustainable competitive advantage (SCA) because they are observable and susceptible to imitation. However, there are notable exceptions, for example, real estate locations adjacent to popular tourist sites (April, 2002).

Intangible resources include trademarks, technological knowledge, patents, accumulated learning and company reputation (Collis & Montgomery, 1995). Intangible resources play an important role in competitive advantage because they are difficult to build and, thus, less easily duplicated by competitors (Reed & DeFillippi, 1990). Amit and Schoemaker (1993, p. 36) call these resources 'strategic assets' – "a set of difficult to trade and imitate, scarce, appropriable and specialized resources and capabilities that bestow the firm's competitive advantage".

One type of intangible resource is social capital. Adler and Kwon (2002) define social capital as the range of resources provided by the structure of social relations. It is the network of relationships that individuals have throughout the organisation. Social capital includes relationships between the firm and its suppliers, customers and alliance partners. It normally grows and develops with use, for example, trust that is demonstrated today typically will be reciprocated and amplified tomorrow (Adler & Kwon, 2002).

### **Characteristics of Resources**

One of the principal insights of the RBV is that not all resources are of equal importance or possess the potential to be a source of SCA (Fahy, 2000). Advantage-creating resources must possess certain characteristics. Grant (1991) presents four characteristics of resources and capabilities that are important in determining the sustainability of competitive advantage, namely, durability, transparency, transferability, and replicability. According to Grant (1991, p. 129), “the firm’s most important resources and capabilities are those which are durable, difficult to identify and understand, imperfectly transferable, not easily replicated, and in which the firm possesses clear ownership and control”.

Collis and Montgomery (1995) suggest that for resources to be a source of SCA they must meet five tests, namely: inimitability, durability, appropriability, substitutability and competitive superiority. Amit and Schoemaker (1993) argue further that advantage-creating resources must meet eight criteria for SCA to be achieved: complementarity, scarcity, low tradability, inimitability, limited substitutability, appropriability, durability, and overlap with strategic industry factors.

Barney (1991) provides, what is arguably, the most detailed and formalised depiction of the RBV. His work solidified the groundwork for the comprehensive framework to identify the needed characteristics of firm resources in order to generate sustainable competitive advantage. Barney (1991) suggests that two assumptions, axioms of the RBV, must be met: (1) resources are distributed heterogeneously across firms, and (2) that these productive resources cannot be transferred from firm to firm without cost, i.e., resources are ‘sticky’. Barney (1991) offers an enhanced framework, identifying four characteristics of resources essential for gaining sustainable competitive advantage. According to Barney (1991), for resources to be sources of SCA, they must meet four criteria. They must be valuable, rare, difficult to imitate and non-substitutable. Such resources are labelled ‘strategic resources’.

**(a) *Valuability***

Firstly, the resources must be valuable, i.e., they must contribute to firm efficiency and effectiveness. A valuable resource enables a firm to improve its market position relative to competitors (Hoopers, Madsen & Walker, 2003). A resource is valuable because buyers are willing to purchase the resources' outputs at prices significantly above their costs (Combs & Ketchen Jr., 1999).

**(b) *Rarity***

Secondly, the resource should be rare, i.e., it must not be widely held. If a particular resource and capability is controlled by numerous competing firms, then that resource is unlikely to be a source of competitive advantage for any one of them (Barney, 1995, p. 52). According to Barney (1995), valuable but common resources and capabilities are sources of competitive parity. To be of value in sustaining competitive advantage, resources must be available in short supply relative to demand (Hoopers *et al.*, 2003). Rarity connotes uniqueness, specificity or scarcity (Espino-Rodriguez & Padron-Robaina, 2006).

Peteraf and Bergen (2003), however, warn against adopting a simplistic view of resource scarcity. They argue that the emphasis on resource scarcity has led some to conclude that firms with valuable resources will necessarily have a competitive advantage if rivals are denied access to resources of the same type (Peteraf & Bergen, 2003). In their view, the limiting factor is not scarcity in terms of resource type, but scarcity in terms of the functions that the resources serve. This is so because "resource bundles that are dissimilar in type may serve as effective substitutes in terms of producing the same end product or its equivalent" (Peteraf & Bergen, 2003, p. 1032).

**(c) *Inimitability***

Thirdly, the resources must be inimitable, i.e., they should not be easily replicated by competitors. The inability of competitors to duplicate resource endowments is a central element of the RBV (Fahy, 2000). A firm's resources can therefore sustain superior economic performance only if the resources are inimitable. Barney (1995) suggests that imitation can occur in at least two

ways: duplication and substitution. 'Duplication' occurs when an imitating firm builds the same kinds of resources as the firm it is imitating (Barney, 1995), whilst 'substitution' occurs when an imitating firm has resources that fulfil the same function. Thus inimitability is a lynchpin of resource-based theory and central to understanding the sustainability of competitive advantage (King & Zeithml, 2001). Collis and Montgomery (1995) argue that inimitability is at the heart of value creation, because it limits competition.

For a firm to be in a position to exploit valuable and rare resources, there must be a resource position barrier to prevent other competitors from imitating those resources. Possessing a resource that competitors easily can copy generates only temporary value. Thus, the sustainability of a resource-based advantage is predicated on the condition of inimitability (Lippman & Rumelt, 1982). If a firm's strategy is based upon resources that competitors can readily buy, then that firm's ability to sustain competitive advantage will be considerably diminished.

Teece, Pisano and Shuen (1997) argue that competences and capabilities can provide competitive advantage because the routines upon which they rest are normally rather difficult to replicate. Imitation is also hindered by the fact that few routines are "stand-alone" – coherence may require that a change in one set of routines in one part of the firm requires changes in some other part (Teece *et al.*, 1997).

### ***Resources and Rent***

Peteraf and Barney (2003) suggest that if resources can be imitated, the rents they generate are Schumpeterian and are likely to be short-lived. Schumpeterian or entrepreneurial rents may be achieved by risk-taking and entrepreneurial insight in an uncertain, complex environment. However, if there are barriers to imitation, then the rents are Ricardian and may be long lasting (Peteraf & Barney, 2003). According to Amit and Schoemaker (1993), Ricardian rents are extraordinary profits earned from resources that are in fixed or limited supply. They may be achieved by owning a valuable resource that is scarce, for example, ownership of valuable land, locational advantages,

patents and copyrights (Mahoney & Pandian, 1992). The other type of rent is monopoly rent that may be achieved by governmental protection or by collusive arrangements when barriers to potential competitors are high (Mahoney & Pandian, 1992).

Peteraf (1993) elucidates the link between resources and economic rents by identifying conditions for sustainable competitive advantage. Firstly, there must be *ex ante* limits to competition – i.e., prior to any firm's establishing a superior resource position, there must be limited competition for that position (Peteraf, 1993). Another condition is that there must be *ex post* limits to competition – i.e., the forces that limit competition and rent generating potential *after* a firm gains competitive advantage (Peteraf, 1993). Amit and Schoemaker (1993) argue that it is the ability of a firm's managers to identify, *ex ante*, a set of strategic assets that helps a firm generate organisational rents thus achieving sustainable competitive advantage.

### ***Asset Accumulation***

Dierickx and Cool (1989) provide a fully articulated model of intangible asset accumulation, from which they conclude that relative resource positions are sustainable. They argue that how inimitable an asset is depends upon the nature of the process by which it was accumulated. It is "the cumulative result of adhering to a set of consistent policies over a period of time, i.e., strategic asset *stocks* are *accumulated* by choosing appropriate time paths of *flows* over a period of time" (Dierickx & Cool, 1989, p. 1506). In their view, inimitability of an asset stock is related to the characteristics of the process by which it may be accumulated, i.e., the degree of inimitability of a particular asset is determined by the interplay of a number of basic properties (Dierickx & Cool, 1989). They identify the following characteristics as serving to impede imitation (and hence ensuring sustainability): time compression diseconomies, asset mass efficiencies, inter-connectedness of asset stocks, asset erosion, and causal ambiguity.

*Time compression diseconomies* imply that asset accumulation cannot be rushed. The presence of *time compression diseconomies* implies that

maintaining a given rate of R&D spending over a particular time interval produces a larger increment to the stock of R&D (Dierickx & Cool, 1989).

*Asset mass efficiencies* imply that the initial level of an asset stock significantly influences the pace of its further accumulation (Dierickx & Cool, 1989). The more assets a firm has, the lower the marginal cost of producing further additions to the asset stock. Adding increments to an existing asset stock is facilitated by possessing high levels of that stock (Dierickx & Cool, 1989). Even if an entrant invests in one year the total sum of the incumbent investments made over several years, it will not achieve the same resource position. This is so because firms who already have an important stock of R&D know-how, for example, are often in a better position to make further breakthroughs and add to their existing stock of knowledge than firms who have low initial levels of know-how (Dierickx & Cool, 1989).

*Interconnectedness of asset stocks* means that accumulating increments in an existing stock may depend not only on the initial level of that stock, but on the low initial level of another stock which is its complement (Dierickx & Cool (1989).

*Asset erosion* means that all asset stocks “decay” in the absence of “maintenance” expenditures (Dierickx & Cool, 1989).

*Causal ambiguity* means that it may be impossible to fully specify which factors play a role in the accumulation process of asset stocks (Dierickx & Cool, 1989). The imitation of those stocks by other firms becomes impossible.

### ***Behavioural Decision-making***

Amit and Schoemaker (1993) attempt to link the ‘industry analysis framework’ with the ‘resource-based view of the firm’, and highlight the human limitations in crafting firm strategy. In essence, they add behavioural decision-making biases as further impediments to the transferability or inimitability of a firm’s resources and capabilities (Amit & Schoemaker, 1993). Amit and

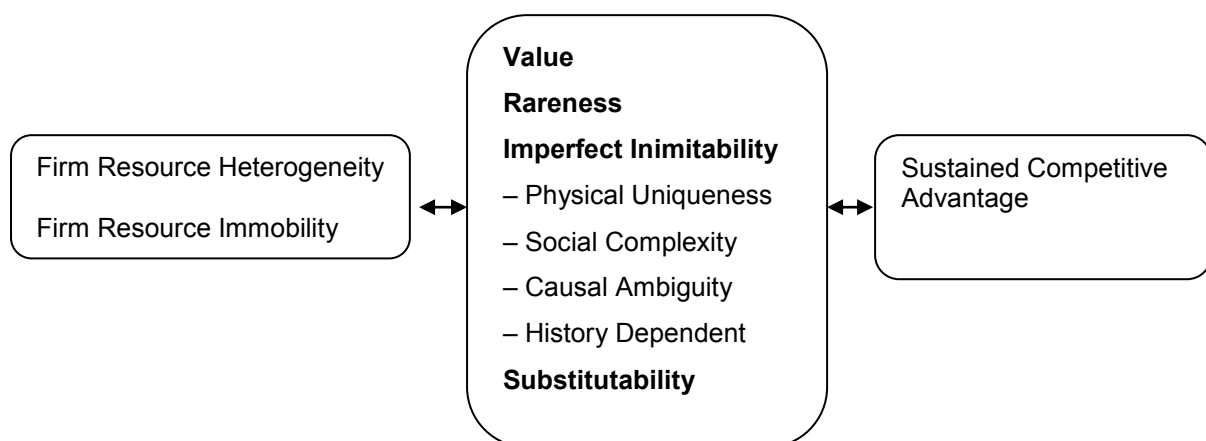
Schoemaker (1993, p. 39) argue that the strategic value of a firm's resources and capabilities is enhanced the more difficult they are to buy, sell, imitate or substitute:

*Invisible assets such as tacit organizational knowledge or trust between management and labour cannot be traded or easily replicated by competitors since they are deeply rooted in the organization's history. Such firm-specifics are history-dependent ... and this idiosyncrasy makes them difficult to imitate and their development time cannot be easily compressed.*

### **Sources of Inimitability**

Barney (1991) suggests that the capabilities to transform commonly available resources into valuable, rare, inimitable, and non-substitutable resources is a barrier to imitation if the capabilities are: (i) physically unique, (ii) socially complex (no-one really understands how the resources are actually transformed), (iii) path dependent (the transformation of resources occurs over time and is routed in the past), and/or (iv) causally ambiguous (no-one understands how capabilities actually result in the final product). Below is a diagram that illustrates Barney's (1991) framework, showing the relationship between characteristics of resources and sustained competitive advantage.

**Figure 3.2: Relationship Between Resource Heterogeneity and Immobility, Value, Rareness, Imperfect Inimitability, and Substitutability, and Sustained Competitive Advantage**



**Source:** Adapted from Barney (1991, p. 112).

*(i) Physical Uniqueness*

The resource should be difficult to copy because it is physically unique, for example a beautiful resort location.

*(ii) Social Complexity*

Social complexity can be found where resources are based on very complex social phenomena – reputation, trust, friendship, teamwork, and culture (Barney, 1995). Such resources are time-consuming and expensive to imitate. Competitors may commit significant amounts of time and money to replicate a competitor's resources, without achieving similar benefits. The source of advantage is known, but the method of replicating the advantage is unclear (Potgieter, April, Cooke & Osunmakinde, 2009).

*(iii) Causal Ambiguity*

Causal ambiguity is the inability of competitors to duplicate resource endowments. However, the discussion of barriers to duplication has been complicated by the conflicting use of terminology in the literature. According to Fahy and Smithee (1999), several overlapping classification schema have been proposed including asset stock accumulation (Dierickx & Cool, 1989), capability gaps (Coyne, 1986), capability differentials (Hall, 1992; 1993), *ex-post* limits to competition (Peteraf, 1993), isolating mechanisms (Rumelt, 1984; 1987), uncertain inimitability (Lippman & Rumelt, 1982), and causal ambiguity (Reed & Fillippi, 1990).

According to Lippman and Rumelt (1982), causal ambiguity refers to the phenomenon surrounding business actions and outcomes that make it difficult for competitors to emulate strategies. It refers to the uncertainty and imperfect understanding regarding the causes of efficiency differences among firms (Peteraf, 1993). It is the relative difficulty of deciphering causal links between organisational resources and outcomes. Causal ambiguity prevents would-be-imitators from knowing exactly what to imitate or how to go about it (Peteraf, 1993). Imitating firms cannot know the actions they should take in order to duplicate the strategies of firms with sustained competitive advantages (April & Schokley, 2005). Thus when an advantage is based on



competencies that have causally ambiguous characteristics, then it will be difficult for competitors to overcome the advantage by imitation (Reed & DeFillippi, 1990).

In essence, causal ambiguity creates barriers to imitation because it limits a competitor's understanding of exactly what it is that makes successful firms successful (Reed & DeFillippi, 1990). The link between the resources controlled by a firm and a firm's competitive advantage is not understood, or understood only imperfectly. It is impossible to disentangle either what the valuable resource is, or how to recreate it (Collis & Montgomery, 1995). According to Peteraf (1993), this uncertainty may limit imitative activity, thus preserving the condition of heterogeneity. In the absence of uncertainty, the creation of a unique resource could be repeated, and its uniqueness destroyed (Reed & DeFillippi, 1990).

Reed and DeFillippi (1990) shed light on the characteristics of resources which individually, or in combination, may prevent their imitation by competitors. These characteristics are: tacitness, complexity and specificity. *Tacitness* refers to the implicit and non-codifiable accumulation of skills that result from learning by doing – the inability to identify or codify a pattern of activities. *Complexity* results from having a large number of interdependent skills and assets, while *specificity* refers to the transaction-specific skills and assets that are utilised in the production processes and provision of services for particular customers (Reed & DeFillippi, 1990). Reed and DeFillippi (1990) argue that the ease with which competitive advantage may be sustained, or the speed with which it is subject to imitation, depends upon the height of the barriers. The most effective barriers to imitation are achieved when competitors do not fully comprehend the competencies on which the advantage is based (Reed & DeFillippi, 1990).

Reed and DeFillippi (1990) argue further that ambiguity may be so great that not even managers within the firm fully understand, or only partly understand (April, 2002), the relationship between actions and outcomes. However, in that situation it may be impossible to utilise competencies to advantage.

Reed and DeFillippis' (1990) clarion call for managers is that, in order to maintain the barriers to imitation and therefore sustainability of advantage, they should invest in the sources of ambiguity, i.e., tacitness in skills, complexity in skill and resource interaction, and specificity of assets.

*(iv) Path Dependency*

Resource inimitability may result from path dependency such as unique historical circumstances. History is important because “as firms evolve, they pick up skills, abilities, and resources that are unique to them, reflecting their particular path through history” (Barney, 1995, p. 53). To illustrate this point, Barney (1995) explains that Caterpillar was able to become the dominant firm in the heavy construction equipment industry, because it received government support as the supplier of heavy construction equipment to build roads, air strips and army bases during World War II. A firm trying to duplicate Caterpillar's world-wide service and supply network for heavy construction equipment is unlikely to receive the same kind of government support (Barney, 1995). Further, by getting in early Caterpillar was able to develop, retain and further embed relationships with specific value-adding suppliers and vendors – and at a specific time in the economic and life-cycle histories of these suppliers and vendors. Caterpillar was able to sign up customers – and with good services and reasonable products, was able to keep the customers locked in through deeper and more complex relationships.

Thus, the unique path through history may enable a firm to obtain unusual resources and resource-related relationships (e.g., with suppliers and vendors) over a long period of time and in a given context as illustrated above. Barney (1991, p. 107) argues that “... companies' ability to acquire and exploit some resources depends upon their place in time and space”. Once a particular unique time in history passes, firms that do not have space- and time-dependent resources cannot obtain them, and these resources are imperfectly imitable. Competitors cannot go out and buy these resources – they must be built over time in ways that are difficult to accelerate (Collis & Montgomery, 1995). Dierickx and Cool (1989) argue that an asset that defies imitation is path dependent, in the sense that it is contingent upon preceding

levels of learning, investment, assets stocks and development activity. For such assets, history matters – “would-be-imitators are thwarted by the difficulty of discovering and repeating the developmental process and by the considerable lag involved” (Peteraf, 1993, p. 183). Path dependency, as a source of inimitability, will be discussed further in this chapter because it forms the theoretical anchor point upon which this research is based.

#### **(d) Substitution**

The fourth criterion for resources to be a source of SCA is that of substitution. Substitution is important because firms may be able to substitute some resources for other resources. Barney (1995) claims that by using its special design and manufacturing skills to build heavy construction equipment that break down less frequently, Komatsu was able to substitute Caterpillar’s world-wide service and supply network. For resources to be a source of SCA, they should therefore be non-substitutable, i.e., other resources should not fulfil the same function. If these substitute resources have the same strategic implications, and are no more costly to develop, then imitation through substitution will lead to competitive parity in the long run (Barney, 1995).

A source of competitive parity for both Coke and Pepsi is how the two companies have battled each other for market share in the soft drink industry (Barney, 1995). Both Coca-Cola and PepsiCo are marketing power-houses; both have enormous financial capabilities and strong management teams (Barney, 1995). While market share has shifted back and forth between them over time, it is not clear that these efforts have generated competitive advantages for either Coke or Pepsi (Barney, 1995). Having recognised the futility of head-to-head competition for market share, both Coke and Pepsi are moving towards exploiting *different* resources. Coke has extended its marketing efforts internationally, whereas Pepsi focuses mostly on the market in the United States of America (Barney, 1995) – imitation through substitution, leading to competitive parity.

### **Resource Complementarity**

According to Amit and Schoemaker (1993), a firm's strategic assets may exhibit complementarity in deployment or application, i.e., the strategic value of each asset's relative magnitude may increase with an increase in the relative magnitude of other strategic assets – positive externalities. April and Shockley (2005) agree, with Amit and Schoemaker (1993), that a firm's resources may exhibit complementarity in their deployment. April and Cradock (2000) coined the term 'complementary resource combinations (CRCs)' to denote such complementarity. April and Cradock (2000) define CRCs as resulting from bundles, or combinations, of certain assets and resources which exhibit complementarity in deployment or application. In a path-breaking study, April (2004) explores how information technology (IT), in combination with other firm resources, can contribute to the development of CRCs. Complementarity arises when a resource produces greater returns in the presence of another resource than it does alone (April, 2002), for example, an electronic data interchange when combined with pre-existing supplier trust (Powell & Dent-Micallef, 1997) – a concept akin to synergistic benefits. April and Shockley (2005) define CRCs as complex and dynamic combinations of resources, people, and processes that a firm uses to transform resource inputs to capability outputs, many of which are configurations of tangible and intangible assets.

### **Resource Heterogeneity**

Peteraf (1993) posits that one of the fundamental tenets of the RBV theory is that resource heterogeneity between firms does exist, and that the rents attained from such heterogeneity can be sustained. She states that heterogeneity is necessary for sustainable competitive advantage, but not sufficient (Peteraf, 1993). She further argues that resources which are immobile, because of their idiosyncratic or firm-specific nature, are certainly heterogenous (Peteraf, 1993). For Peteraf (1993), resource heterogeneity implies that some firms have resources that generate more value than others. Peteraf and Barney (2003) argue that firms with superior resources, in terms of their ability to generate more value, will have a competitive advantage in terms of differential residual value. However, the process is not automatic – it

requires the moderating interventions of managerial choices in the identification, development, protection and subsequent deployment of resources in product markets (Fahy, 2000). Teece, Pisano and Shuen (1997, p. 519) are more explicit: “the way production is organized by management inside the firm is the source of differences in firms’ competence in various domains”. To that extent, competitive advantage lies with its managerial/people and organisational processes, shaped by its (specific) asset position, and the paths available to it (Teece *et al.*, 1997).

Amit and Schoemaker (1993) take the discussion further by arguing that firms differ in the resources and capabilities they control because of resource-market imperfections, and discretionary managerial decisions about resource development and deployment. This can be a source of sustainable economic rent, and stem from imperfect and discretionary decisions to develop and deploy selected resources and capabilities, made by boundedly rational managers facing high uncertainty, complexity, and intra-firm conflict (Amit & Schoemaker, 1993).

Peteraf and Barney (2003) posit that so fundamental is the condition of heterogeneity to resource-based theory (RBT) that it is the *sine qua non* of this theory. However, in their view, while heterogeneity can result from uncertainty and immobility, other possibilities include path dependency, chance events, governmental largess, and unevenly distributed property rights (Peteraf & Barney, 2003).

### **Resource Immobility**

Peteraf (1993) argues that resources are perfectly immobile if they cannot be traded, or if they are idiosyncratic to the extent that they have no other use outside the firm. According to Dierickx and Cool (1989), loyalty of one’s dealers or the trust of one’s customers cannot be bought. Dealer loyalty must be cultivated and customers’ trust must be earned through a history of honest dealings (Dierickx & Cool, 1989). Loyalty and trust are examples of what economists call ‘externalities’ and have practical economic value but they cannot be traded on the open market (Dierickx & Cool, 1989).

Other kinds of resources may be described as tradeable, for example many inputs like raw materials, required by most firms may be bought and sold on the open market (Dierickx & Cool, 1989). Because immobile or imperfectly mobile resources are non-tradeable, or less valuable to other users, they remain bound to the firm and are available for use over the long run (Peteraf, 1993). Teece *et al.* (1997) agree that firm-specific assets that are impossible to imitate are difficult to transfer among firms, because of transaction costs, transfer costs, and because the assets may contain tacit knowledge. To that extent, they can be a source of sustained competitive advantage.

### **Sustainable Competitive Advantage (SCA)**

For competitive advantage to be a theoretically meaningful construct for strategy research, its definition must be clearly stated and its operationalisation better specified. According to Fahy (2000, p. 96), the RBV starts with the assumption that “the desired outcome of managerial effort within the firm is a sustainable competitive advantage”. Competitive advantage is the unique position an organisation develops *vis-à-vis* its competitors through its patterns of resource deployments (Reed & DeFillippi, 1990). Peteraf and Barney (2003) posit that competitive advantage derives from firm-specific resources that are scarce (rare) and superior in use, relative to others. It is an indicator of the firm’s potential to beat its rivals in terms of rents, profitability, market share, and other outcomes of interest (Peteraf & Barney, 2003). Peteraf and Barney (2003) further argue that there are several routes to competitive advantage – it simply requires an enterprise to be a superior, perceived value generator, relative to the least efficient competitor capable of breaking even.

According to Barney (1991, p. 102), “... a firm has SCA when it is implementing a value-creating strategy not simultaneously being implemented by any current, or potential, competitors and when these other firms are unable to duplicate the benefits of this strategy”. Thus a central element of the RBV in explicating SCA is the inability of current and potential competitors to duplicate the value-generating resource, routine or capability.

Coyne (1986) suggests that for a competitive advantage to be meaningful, it has to meet three conditions: (1) customers should perceive a consistent difference in important attributes between the producer's product or service and that of competitors, (2) the difference should be the direct consequence of a capability gap between the producer and his or her competitors, and (3) both the difference in important attributes and the capability gap can be expected to endure over time.

According to Lado, Boyd, Wright and Kroll (2006), sustainability of competitive advantage is enhanced when the firm's resources and capabilities are 'opaque' such that nobody (including the focal firms' management or employees) can fully understand their value-enhancing attributes. However, the opacity of such resources might frustrate the leveraging of such competencies within the firm to gain strategic advantage. Fahy (2000), as well as April and Craddock (2000), argue that sustainability does not refer to a particular period of calendar time, nor does it imply that advantages persist indefinitely; rather it depends on the possibility and extent of competitive duplication.

Barney (1991) suggests that firms, in general, cannot expect to obtain SCA when strategic resources are evenly distributed across competing firms and are highly mobile. Thus, the central premise of the RBV addresses the fundamental question of why firms are different, and how firms achieve and sustain competitive advantage by deploying their resources in unique ways. The RBV theory postulates that firms are heterogeneous in terms of the strategic resources they own and control, and therefore in the potential capabilities they are able to create. The search for sources of SCA must necessarily focus on firm resource heterogeneity and immobility, as well as inimitable routines and the dynamism of its capabilities.

### **Resources and Capabilities**

A distinction has emerged in the RBV literature between resources and capabilities. Grant (1991) argues that resources are the source of a firm's capabilities, while capabilities are the main source of its competitive

advantage. He has provided further clarification: “a capability is the capacity for a team of resources to perform some task or activity” (Grant, 1991, p. 119). Although firms have access to common resources, “it is their capability to configure and deploy these resources ... which leads to a differentiated offering...” (Bitar & Hafsi, 2007, p. 405). Thus a capability encompasses the skills of individuals or groups, as well as organisational routines and interactions through which all the firm’s resources are co-ordinated (Grant, 1991).

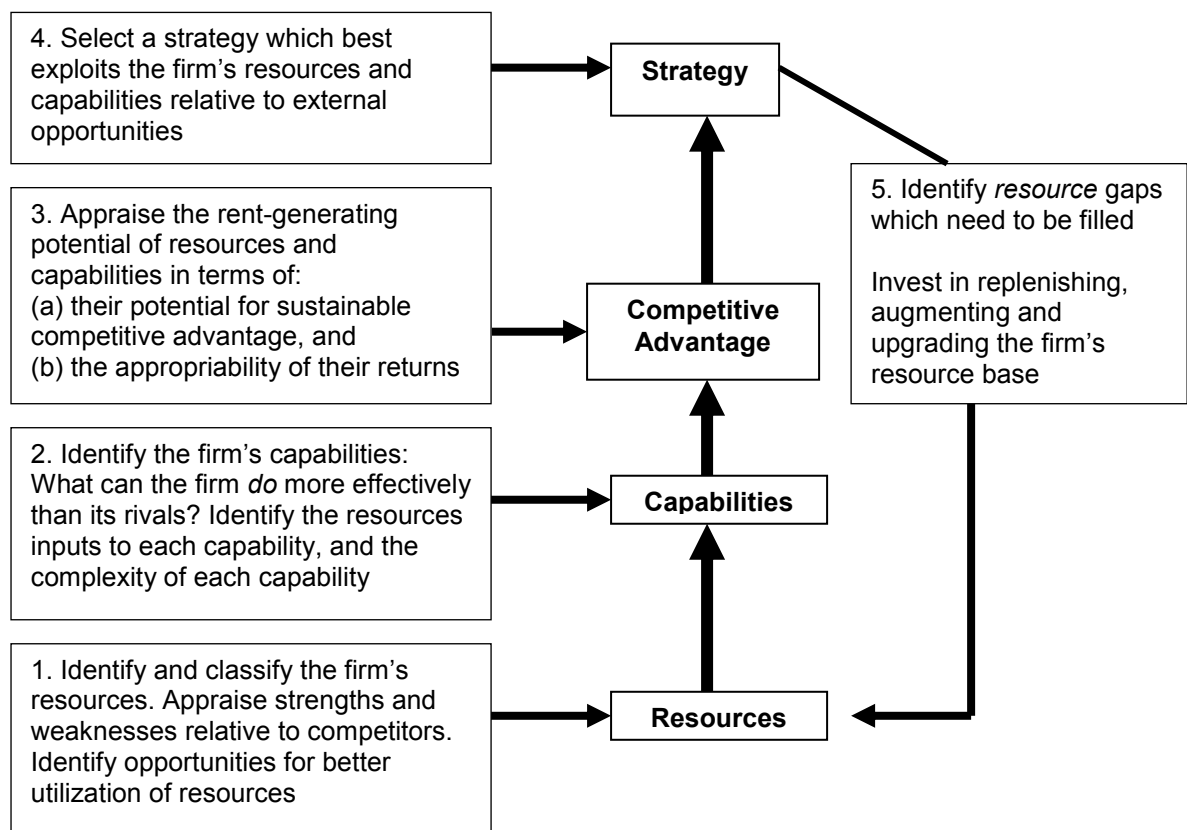
Capabilities therefore are not generic but are usually firm-specific, whereas resources may be available to many competitors (Bitar & Hafsi, 2007). While both a capability and a resource might lead to competitive advantage, a capability encompasses resources and expands their potential (Bitar & Hafsi, 2007). Capabilities evolve in response to problems defined in a specific context. In essence, “each organization develops its own configuration of capabilities shaped by its specific environment, history and future anticipations” (Bitar & Hafsi, 2007, p. 409).

Capabilities are capacities to deploy resources to perform tasks. Bitar & Hafsi (2007, p. 408) argue that organisations do not go about creating capabilities: “rather they emerge when individuals identify problems, set local objectives and try to achieve them by identifying and implementing new solutions ...”. They are problem-finding and problem-solving routines that allow organisations to find solutions (Bitar & Hafsi, 2007). Typical routines and interactions include teamwork, organisational culture and trust between management and workers. Routines are to the organisation what skills are to the individual (Grant, 1991). Capabilities thus emerge through the activities of individuals interacting with each other within a specific context (Bitar & Hafsi, 2007). According to Bitar and Hafsi (2007), capabilities cannot be mechanically ‘built’, but develop over time through activities and learning. Since the process is cumulative and driven by learning, it is path dependent (Bitar & Hafsi, 2007).



One major strength of capabilities, as a source of competitive advantage, is that “because they require interactive teams of resources, they are far more immobile than individual resources – they require the transfer of the whole team” (Grant, 1991, pp. 126-127). Grant (1991) proposes a framework for a resource-based approach to strategy formulation which integrates key themes from the RBV.

**Figure 3.3: A Resource-Based Approach to Strategy Analysis: A Practical Framework**



**Source:** Adapted from Grant (1991, p115).

There seems to be a growing consensus that a capability does not represent a single resource. According to Makadok (2001), a resource is an observable (but not necessarily tangible) asset that can be valued and traded – such as a brand, a patent, a parcel of land, or a license. A capability, on the other hand, is not observable (and hence necessarily intangible), cannot be valued, and changes hands only as part of its entire unit (Hoopes, Madsen & Walker,

2003). A capability can be valuable on its own, or enhance the value of a resource. It is a special type of resource – specifically, an organisationally embedded non-transferable firm-specific resource whose primary purpose is to enhance the productivity of the other resources that the firm possesses (Makadok, 2001). Capabilities do not represent resources, but focus on the combination and linking of resources (Schreyogg & Kliesch-Eberl, 2007). It is the coherence among capability components that is the source of a capability's effectiveness and ultimately of the firm's competitive advantage (Bitar & Hafsi, 2007).

Helfat and Peteraf (2003, p. 999) define a resource as “an asset or input to production that an organization owns, controls, or has access to on a semi-permanent basis”. A capability on the other hand, “refers to the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result” (Helfat & Peteraf, 2003, p. 999). Marcus and Anderson (2006) posit that capabilities represent the system's separate components, while competencies represent its realised wholes. Capabilities refer to the complex processes across the organisation, such as product development and customer satisfaction (Schreyogg & Kliesch-Eberl, 2007). Capabilities suggest potential, while competencies connote achieved proficiencies – the completed totality (Marcus & Anderson, 2006). According to Wang and Ahmed (2007: p. 35), “Resources are the foundation of a firm and the basis of firm capabilities”.

Coyne (1986) identifies four types of capability differential, i.e., functional differential, cultural differential, positional differential and regulatory differential. Functional capability relates to the ability to do specific things; it results from the knowledge, skills and experience of employees, and others in the value chain such as suppliers, distributors, and advertising agents. Cultural capability incorporates the habits, attitudes, beliefs and values, which permeate the individuals and groups which comprise the organisation (Coyne, 1986). Positional capability is a consequence of past actions which, for example, have produced a certain reputation with customers (Coyne, 1986).

Regulatory capability results from the possession of legal entities such as intellectual property rights, contracts, and trade secrets (Coyne, 1986).

Easterby-Smith and Prieto (2007, p. 3) suggest three types of capabilities: Operational capabilities or routines are “geared towards the operational functioning of the organisation”; dynamic capabilities are “dedicated to the modification of operational routine”; while learning capabilities “facilitate the creation and modification of dynamic capabilities”.

According to Collis and Montgomery (1997), capabilities include individual skills and organisational routines, processes and culture. Amit and Schoemaker (1993) refer to capabilities as a firm’s capacity to deploy resources, usually in combination, using organisational processes, to effect a desired end. Grant (1991) posits that capabilities encompass the skills of individuals or groups, as well as the organisational routines and interactions through which all the firm’s resources are co-ordinated, for example, teamwork, organisational culture, and trust between management and workers. Barney (1991)’s definition of firm resources includes assets, capabilities, organisational processes, firm attributes, information, and knowledge – controlled by the firm that enables the firm to conceive of and implement strategies that improve its efficiency and effectiveness.

### **Dynamic Capabilities**

Recently in the capability debate, the issues of volatile markets, environmental uncertainty, and change have come to the fore (Schreyogg & Kliesch-Eberl, 2007). The notion of ‘dynamic’ is devoted to addressing the continuous renewal of organisational capabilities, thereby matching the demands of changing environments (Schreyogg & Kliesch-Eberl, 2007). The most influential article on dynamic capabilities and strategic management is that of Teece, Pisano and Shuen (1997). In their seminal framework, Teece *et al.* (1997) posit that dynamic capabilities refer to the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. The term ‘dynamic’ refers to the capacity to renew competences so as to achieve congruence with the changing business

environment (Teece *et al.*, 1997). 'Capabilities' emphasises the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organisational skills, resources, and functional competences to match the requirements of a changing environment (Teece *et al.*, 1997). They further argue that in turbulent times, a firm must rely on the ability to create, maintain and renew its bases of competitive advantage. Thus organisational processes, shaped by the firm's asset positions and moulded by its evolutionary and co-evolutionary paths, explain the essence of a firm's dynamic capabilities and its competitive advantage (Teece *et al.*, 1997).

Teece *et al.* (1997) argue that competences and capabilities can provide competitive advantage because the routines, upon which they rest, are normally rather difficult to replicate. Imitation is also hindered by the fact that few routines are 'stand-alone' – coherence may require that a change in one set of routines, in one part of the firm, requires changes in some other part (Teece *et al.*, 1997).

Similarly, Eisenhardt and Martin (2000, p. 1106) define dynamic capabilities as "the specific and strategic processes like product development, alliancing, and strategic decision making that create value for firms within dynamic markets by manipulating resources into new value-creating strategies". They conceptualise dynamic capabilities as tools that integrate resources, some which focus on reconfiguration of resources within firms, and others which include knowledge-creating routines (Eisenhardt & Martin, 2000).

Eisenhardt and Martin (2000, p. 1106) further argue that "since the functionality of dynamic capabilities can be duplicated across firms, their value for competitive advantage lies in the resource configurations that they create, not in the capabilities themselves". To that extent, dynamic capabilities are necessary, but not sufficient, conditions for competitive advantage. Their value for competitive advantage lies in their ability to alter the resource base: create, integrate, recombine, and release resources (Eisenhardt & Martin, 2000). Further, long-term competitive advantage lies in using dynamic

capabilities sooner, more astutely, or more fortuitously than the competition to create resource configurations that have that advantage (Eisenhardt & Martin, 2000). This advantage is particularly enhanced when the related resource configurations are combinations of tightly woven, synergistic activities (April and Cradock, 2000; Collis and Montgomery, 1995; Prahalad and Hamel, 1990).

Wang and Ahmed (2007) identify three main component factors of dynamic capabilities, namely, adaptive capability, absorptive capability and innovative capability. Adaptive capability is the firm's ability to identify and capitalise on emerging market opportunities, involving balancing exploration and exploitation strategies (Wang & Ahmed, 2007). Firms that have high levels of adaptive capability exhibit dynamic capabilities (Teece *et al.*, 1997). Absorptive capability refers to the ability of a firm to learn from partners, integrating external and internal knowledge and absorbing it for internal use (Wang & Ahmed, 2007). Innovative capability refers to the firm's ability to develop new products or markets (Wang & Ahmed, 2007).

Schreyögg and Kliesch-Eberl (2007) conceptualise dynamic capabilities as having three dimensions, viz., positions, paths and processes. 'Position' refers to both internal and external positions. The internal position relates to the specific set of resources available in a firm (financial, technological and reputational). The external refers to the specific market position/assets of the focal firm. 'Paths' represents the history of an organisation, i.e., the current position of a firm is basically shaped by the patterns evolved from the past. Where a firm can go in the future, depends on its current paths and their shaping force (Schreyögg & Kliesch-Eberl, 2007). 'Processes' are devoted to co-ordinating and integrating available resources – organisational learning and the reconfiguration of resources. The interaction of these static and dynamic components is assumed to converge to a 'dynamic capability' (Schreyögg & Kliesch-Eberl, 2007).

### ***Criticism of the Concept of Dynamic Capabilities***

Some of criticisms that have been levelled against the concept of dynamic capabilities is that the concept is insufficiently underpinned by empirical data – and that Teece, Pisano and Shuen's (1997) paper was based on summarising studies which had been designed to examine phenomena other than dynamic capabilities (Easterby-Smith & Prieto, 2007). Further, Eisenhardt and Martin (2000) argue that although Teece, Pisano and Shuen's (1997) paper works well in moderately dynamic environments, it does not work so well in, what they refer to as, 'high-velocity markets'. In their view, the stability of dynamic capabilities breaks down in this environment and become "unstable processes that are challenging to sustain" (Eisenhardt & Martin, 2000, p. 1106).

### ***Dynamic Capabilities: Consensus and Convergence***

There are signs of some consensus emerging in the literature regarding dynamic capabilities. In this regard, dynamic capabilities have been positioned as an extension of the RBV, essentially complementing the RBV as an attempt to explain competitive advantage in a rapidly changing environment (Menon, 2008). The concept has brought new vigour to the RBV framework because of the realisation that valuable, rare, inimitable and non-substitutable (VRIN) resources do not persist over time, and so they cannot be a source of sustainable competitive advantage. Dynamic capabilities, on the other hand, emphasise "a firm's constant pursuit of the renewal, reconfiguration and recreation of resources in order to address environmental change" (Wang & Ahmed, 2007, p. 36). It encompasses market dynamism as an influential factor for firm capability development and evolution (Eisenhardt & Martin, 2000). To that extent, they are conducive to long-term performance (Wang & Ahmed, 2007). The concept of dynamic capabilities has given the RBV framework a new lease of life because it attempts to provide some guidance on how firms can adapt, renew and reconfigure their resources and capabilities to achieve congruence with a changing competitive environment.

### **Criticism of the RBV**

According to Kraaijenbrink, Spender and Groen (2010), the RBV has become one of the most influential and cited theories in the history of management theorising. They go on to claim that this is not surprising, given its elegance and simplicity. However, it has received its fair share of criticisms. Kraaijenbrink *et al.* (2010) summarise the criticisms of the RBV under the following categories:

- i. the RBV has no managerial implications.
- ii. the RBV implies infinite regress.
- iii. the RBV's applicability is too limited.
- iv. SCA is not achievable.
- v. the RBV is not a theory of the firm.
- vi. VRIN is neither necessary, nor sufficient, for SCA.
- vii. the value of a resource is too indeterminate to provide for useful theory.
- viii. the definition of resource is unworkable.

Kraaijenbrink *et al.* (2010) argue that the first five criticisms do not really threaten the RBV's status, but the last three critiques offer more serious challenges. In their view, critiques are valuable for advancing the RBV, for by exploring its limitations they imply where improvements might be made (Kraaijenbrink *et al.*, 2010).

### ***Definitional Ambiguities***

Another criticism that has been levelled against the RBV is the relative vagueness or lack of agreement on the definition of its terms (de Chabert, 1998). Peteraf (1993, p. 180) echoes this criticism, "...subtle variations in terminology across papers have made communication more difficult". Fahy (2000, p. 97) concurs with this observation:

*A further problem of nomenclature hampering the development of the resource-based view has been the variety of labels used to describe the firm's resource set. For example the term competencies appears frequently*

*in the literature, sometimes preceded by the adjectives, core and distinctive, sometimes not, sometimes used interchangeably with the term capabilities, which, in turn, is used interchangeably with the term skill, which is frequently preceded by the adjective core.*

However, Ray and Ramakrishnan (2006, p. 14) observe that "... most differences of definitions that exist appear to be purely semantic, repetitive and topic-based". The composition of the RBV stream includes the following concepts: 'core competencies' (Prahalad & Hamel, 1990), 'dynamic capabilities' (Teece & Pisano, 1994; Eisenhardt & Martin, 2000), 'strategic firm resources' (Barney, 1996), and 'the knowledge based theory of the firm' (Grant, 1996; April, 2002). The RBV however, takes the 'core competence' thinking further by positing that competitive advantage can be sustained only if the capabilities creating the advantage are supported by resources that are not easily duplicated by competitors (April & Shockley, 2005). In fact, a firm's resources or combinations of resources must raise barriers to imitation if they are to provide a basis for sustainable competitive advantage – impediments to imitation that Rumelt (1984) calls 'isolating mechanisms'. Firms establish strategies and use them as isolating mechanisms to reduce other firm's abilities to compete directly with them (Carter & Ruefli, 2006). Incumbent firms may discourage, or thwart, other firms' attempts to compete, by erecting isolating mechanisms that are unlikely to be imitated (Carter & Ruefli, 2006). The more difficult strategic moves are to imitate, the more likely firms will be able to sustain a competitive advantage.

Amit and Schoemaker (1993) introduce the concept of the Behavioural Decision Theory (BDT) which states that the cognitive imperfections of managers have a great impact on the firm's approach to its external environment. This perspective acknowledges that managers often make sub-optimal choices because, in making investment decisions about strategic assets, managers face considerable uncertainty, complexity, conflict, and ambiguity (Amit & Schoemaker, 1993). Managers approach this uncertainty with considerable bias, illusion and sub-optimality. To that extent, their judgements and choices are likely to exhibit idiosyncratic aversions to risk and



ambiguity – discretionary managerial decisions that can create imperfect inimitability and organisational rents for some firms (Amit & Schoemaker, 1993).

Peteraf and Barney (2003) use the term 'resource-based theory' (RBT) to refer to the RBV. They argue that the RBT is about efficient organisation and operation, the elimination of waste and effective adaptation. The theory provides a *resource-level* and *enterprise-level* explanation of sustained performance differences among firms (Peteraf & Barney, 2003).

### ***Ownership Debate***

Lavie (2006) advances the debate of the RBV by offering a theoretical analysis of the competitive advantage of firms participating in alliances. He believes that one of the limitations of the RBV is that it focuses on resources that are owned, or controlled, by the firm (Lavie, 2006). According to Lavie (2006), many studies latently assume that the appropriability of rents requires ownership, or at least complete control by the focal firm, of the rent-generating resources (Lavie, 2006). Lavie (2006, p. 640) argues that Barney (1991) classifies resources as "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. *controlled by the firm...*". Wernefelt (1984, 172) defines resources as "tangible and intangible assets which are *tied semi-permanently to the firm*". Further, Amit and Shoemaker (1993, p. 35) define resources as "stocks of available factors that are *owned or controlled by the firm*".

Grant (1991, p. 129) is also guilty of the "ownership" limitation in his characterisation of resources and capabilities: "... the firm's most important resources and capabilities are those which are durable, difficult to identify and understand, imperfectly transferable, not easily replicated, and *in which the firm possesses clear ownership and control*". Lavie (2006) argues that these RBV studies fail to explain how firms gain competitive advantage in an environment where they maintain frequent, and multiple, collaborative relationships with alliance partners.

Lin (2006, p. 548) echoes Lavie's (2006) argument by proposing that "... proponents of the RBV should broaden their view to include the idea that the value of innovation generated from resources and capabilities could be owned and controlled by a coalition of firms rather than a single firm ...". Lavie (2006) suggests that this perspective may have resulted from the popularity of competitive strategy (as opposed to co-operative strategy). According to Lavie (2006, p. 641), "Ownership or control of resources is not a necessary condition for competitive advantage". In the same vein, Dyer and Singh (1998) posit that while the search for competitive advantage has focused on those resources that are housed within the firm, a firm's critical resources may extend beyond firm boundaries. In this regard, "... collaborating firms can generate relational rents through relation-specific assets, knowledge-sharing routines, complementary resource endowments, and 'effective governance'" (Dyer & Singh, 1998, p. 676).

### ***Paradox Within the RBV***

Herrmann (2005) suggests that the RBV has not achieved a dominant design status, and researchers have criticised its vague and tautological character, as well as its lack of empirical grounding. Hoopes, Madsen and Walker (2003) argue that the RBV's lack of clarity regarding its core premise, and its lack of any clear boundaries, impede fruitful debate.

At the forefront of the criticism of the RBV have been Priem and Butler (2001), who question the theoretical value of the RBV, especially Barney's (1991) ideas that a resource must be valuable, rare, inimitable and non-substitutable in order to generate sustained competitive advantage. They argue that these RBV propositions are tautological – that is, they are true by definition and cannot be subjected to empirical testing. Porter (1981, p. 108) is of the same mind – the RBV runs the risk of being tautological: "Successful firms are successful because they have unique resources. They should nurture these resources to be successful". Powell (2001, p. 883) joins the chorus of criticisms of the RBV as being "tautologous, with no empirical evidence bearing on their truth or falsity". In his view, "there appears to be no falsified, unfalsified theory of competitive advantage, nor any competitive advantage

propositions defensible without resort to ideology, dogmatism or faith” (Powell, 2001, p. 883).

Fahy (2000, p. 99) adds his voice to the criticism of the RBV by asserting that “...the vast majority of the contributions within the RBV have been of a conceptual rather than an empirical nature, with the result that many of its fundamental tenets still remain to be validated in the field”. Powell (2001, p. 885) believes that the search for sustainable competitive advantage “arises from a false mental picture, namely the idea that competitive advantage resides somewhere in time and space, findable in the same way that we find a misplaced fountain pen, or a sunken ship”.

Collis (1994) is in agreement with Powell (2001) in explicating the futility of searching for competitive advantage. Collis (1994) argues that the RBV is in danger of slipping into an “infinite regress”, that is, that the RBV could lead to an endless and futile search for the ultimate stock of resources and capabilities that generate sustained competitive advantage. He goes on to state that a position of competitive advantage will not be sustained because of the erosion of the capability as the firm adapts to external or competitive changes, the replacement of a capability by a different capability, and being surpassed by a better capability (Collis, 1994). This “infinite regress” could undermine the theoretical utility of the RBV in explaining and predicting sustainable competitive advantage.

### ***In Defence of the RBV***

Lado, Boyd, Wright and Kroll (2006) vigorously challenge the criticism that RBV logic is paradoxical, infused with contradictions and ambiguity and that this diminishes their explanatory power. In their view, a proliferation of theoretical assumptions, analytical tools and vocabularies for investigating strategic management phenomena reflects healthy competition among the RBV schools – it is a sign of theoretical progress (Lado *et al.*, 2006). They further argue that this criticism is rooted in the traditional view of scientific enquiry, which holds that paradoxes are anathema to scientific enquiry. In their view, RBV paradoxes reflect the paradoxes inherent in scientific enquiry

(Lado *et al.*, 2006). Their clarion call to researchers is that: “Theoretical concepts are introduced, modified, and changed over time as researchers and practitioners gain new knowledge and understanding concerning how firms generate superior performance” (Lado *et al.*, 2006, p. 120). Researchers are therefore called upon to work within, and through, the RBV paradoxes to advance understanding, rather than insist on the resolution of paradox through the search for theoretical purity and the quest for certainty, because such efforts are illusory (Lado *et al.*, 2006). They conclude their admonition with a charismatic finality – we should “... direct our ingenuity to the service of discovery, rather than just empirical validation ...” (Lado *et al.*, 2006, p. 125). In the same vein, Herrmann (2005, p. 120) argues that the proliferation of studies on the RBV “... is indicative of an era of ferment and, more importantly, it allows for discovery of the ideas that will become the foundations of new paradigms in the field”.

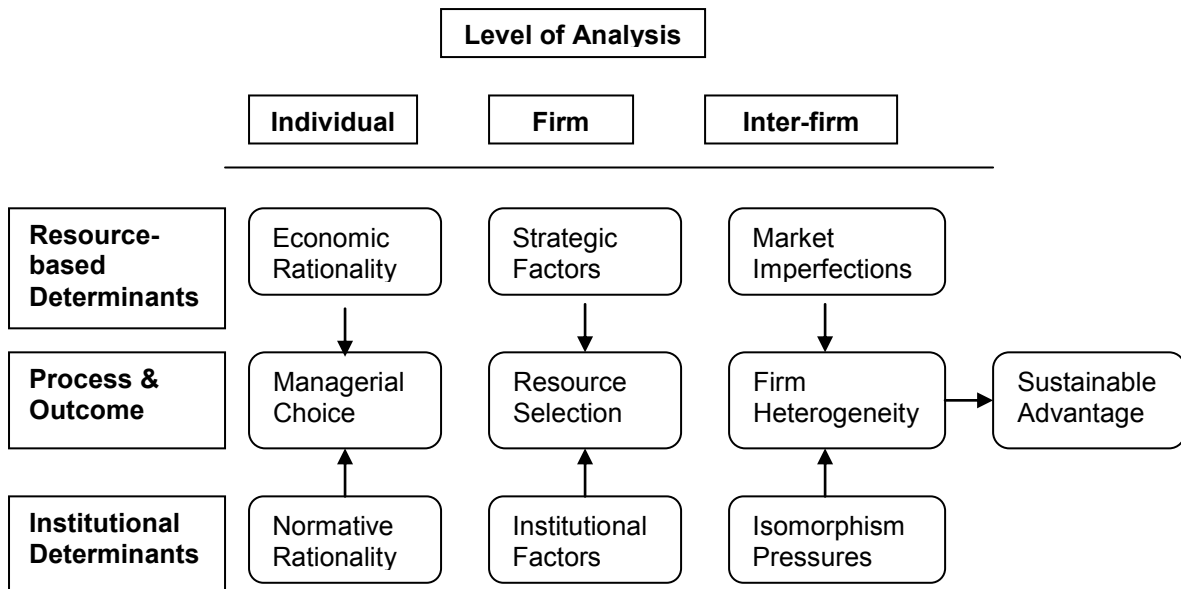
### ***Institutional Perspective of the RBV***

McEvily and Zaheer (1999) argue that researchers who employ the RBV framework tend to explain firm heterogeneity and profitability differences as arising primarily from internally generated capabilities, implicitly suggesting that firms are autonomous and atomistic in their pursuit of competitive advantage. They have countered this perspective by highlighting the role of network resources, arising from the firm’s ties with other economic and non-economic actors. They came up with the ‘embeddedness’ notion, in which a firm’s network of resources of inter-firm ties and institutional linkages expose it to new ideas, information, and opportunities about competitive advantage (McEvily & Zaheer, 1999). Thus a firm’s configuration of linkages with other actors is an important vehicle through which the firm’s skills, competencies and routines are continually upgraded, refreshed and renewed (McEvily & Zaheer, 1999).

A related criticism of the RBV has been advanced by Oliver (1997), who argues that the RBV has not examined the *social context* within which resource selection decisions are embedded. In her view, firm heterogeneity and sustainable competitive advantage should incorporate the social context

of resource selection. In this regard, Oliver (1997) advances the institutional theory to explain how sustainable competitive advantage is achieved. Her ideas are encapsulated in the diagram below.

**Figure 3. 4: Institutional Theory: Determinants of the Process of Sustainable Competitive Advantage**



**Source:** Adapted from Oliver (1997)

Her starting point is that the basic argument of the RBV is that:

*... rare, specialized, inimitable resources and resource market imperfections cause firm heterogeneity, and that successful firms are those that acquire and maintain valuable idiosyncratic resources for sustainable competitive advantage (Oliver, 1997, p. 700).*

However, in contrast, institutional theory asserts that:

*Firms' tendencies toward conformity with predominant norms, traditions, and social influences in their internal and external environments lead to homogeneity among firms in their structures and activities, and that successful firms are those that gain support and legitimacy by conforming to social pressures (Oliver, 1997, p. 700).*

This conformity occurs at the level of the individual, firm and inter-organisational levels. At the individual level, sources of conformity include a manager's norms and habits. At the firm level they include corporate culture, shared belief systems and political processes, while at the inter-organisational level pressures for conformity (isomorphism) involve the government, industry alliances, and societal expectations (Oliver, 1997). In this regard, while "isolating mechanisms", as barriers to imitation, protect a firm's competitive advantage under the RBV theory, institutional isolating mechanisms are not a source of competitive advantage, because a firm is reluctant to acquire resources that are incompatible with the firm's cultural and political context (Oliver, 1997).

In his contribution to institutional theory, North (1999) defines a new way to consider the structure of institutions and their impact on organisations. According to North, organisations are groups of individuals who work toward a common goal or objective and have common interests. They include political bodies, economic bodies, social bodies and educational bodies (Scott, 1987). However, although institutions lead to regularised or homogeneous behaviour within a group, they can often underline differences across nations, as well as industries, firms, and individuals (Mahalingam & Levitt, 2007).

Institutions are the rules in an organisation and they reduce uncertainty by providing a structure to everyday life (North, 1999). Eisenhardt (1988, p. 493) agrees: "The use of structures and processes that are legitimized by an environment can be sensible because it implies responsible management". As organisations evolve, they alter the institutions.

North (1999) argues that while the objective of private institutions is profit maximisation, that of public institutions, like political parties, is to win elections and in the case of a College, to educate students. Competition forces organisations to continually acquire skills and knowledge that will enhance their survival.

According to North (1999), institutions determine the opportunities in a society. Organisations are created to take advantage of those opportunities. Institutions typically change incrementally rather than in a discontinuous fashion. “Although formal rules may change overnight, as a result of political or judicial decisions, informal constraints embodied in customs, traditions and code on conduct are much more impervious to deliberate policies” (North, 1999, p. 6). “These cultural constraints not only connect the past with the present and future, but provide us with a key to explaining the path of historical change” (North, 1999, p. 6).

## **Path Dependency: Does History Really Matter?**

### **Introduction**

So far this chapter has looked at the origins of the RBV theory, its relationship with the IO paradigm and the debates surrounding its status as a theory. Barney (1991) argues that the capabilities to transform commonly available resources into valuable, rare, inimitable and non-substitutable resources are barriers to imitation if the capabilities are physically unique, socially complex, causally ambiguous and path dependent. The rest of this Chapter will explore the concept of path dependency, which is one of the characteristics of difficult-to-imitate resources – a concept that forms the theoretical anchor point for this study.

### **Defining Path Dependency**

According to Zukowski (2004), in spite of being widely used, the term ‘path dependency’ has not yet a commonly accepted precise definition. The term is used mostly as a broad label, indicating all kinds of imprinting effects of the past on organisational behaviour (Sydow, Schreyögg & Koch, 2009). However, the concept of path dependency is now widely accepted even by its critics (Mahoney, 2000; Sydow, *et al.*, 2009; Ruttan, 1997; Liebowitz and Margolis, 1990; 1994; 1995). The concept originated as an idea that a small initial advantage, or a few minor random shocks along the way, could alter the course of a firm’s history (David, 1985). It entails the argument that past events influence future events – what has happened, at an earlier point in time, will affect the possible outcomes of a sequence of events occurring at a

later point in time (Mahoney, 2000). Mahoney's (2000) definition strikes resonance with Helo and Kekäle's (2006, 64) contribution, i.e., that "path dependence refers to a phenomenon where series of events result in an unpredictable stage and the whole process depends on the very initial events".

According to David (2007), a dynamical process whose evolution is governed by its own history is 'path dependent'. An initial idea is seen to constitute some sort of 'seed' that grows by the self-generating dynamics of the process (Dopfer, 1991). Path dependency conveys the idea that "current and future states, actions and decisions depend on the path of previous states, actions, or decisions" (Page, 2006, p. 88). It suggests that current phenomena cannot be adequately understood without knowledge of how they have been shaped by past events (Mwangi, 2006). Thus events, decisions, and arrangements put in place at one moment constrain the choices available later (Bridges, 2000).

According to Kay (2003), a system is path dependent if initial moves in one direction elicit further moves in that same direction – self-reinforcing mechanisms or positive feedbacks. In his discussion on the Scandinavian welfare state, Cox (2004, p. 207) argues that path-dependency is "the tendency to hold on to comfortable values in a changing world". Path dependency thus explains why organisations are products of their history, and are strongly constrained by the imprinting conditions of the founding moments (Lamberg & Tikkanen, 2006). Thus, the starting point for an explanation of path dependency stresses the importance of past events for future action (Sydow *et al.*, 2009). In this regard, history can be quite important for explaining strategic choices and organisational failures (Sydow *et al.*, 2009).

According to Liebowitz and Margolis (1995, p. 205):

*The claim for path dependence is that a minor or fleeting advantage or a seemingly inconsequential lead for some technology, product, or standard can have important and irreversible influence on the ultimate market allocation of*



*resources, even in a world characterized by voluntary decisions and individually maximizing behaviour.*

Booth (2003) posits that historical forces that affect the strategic management of organisations have been highlighted through the concept of path dependency. Through this concept, 'history' is made manifest in the strategy literature. Booth (2003, p. 98) argues that path dependency "... implies the notion that firms' decisions and actions open up or close down future choices regarding products, markets and technologies". In fact, once a particular path has been adopted, it becomes more and more difficult to change that path or to select previously available options, even if those earlier alternatives would have been more efficient (Mwangi, 2006). The reinforcement of one sequence across time (i.e., positive feedbacks, increasing returns or lock-in) may lead to sub-optimal outcomes, as the costs of transformation outweigh the benefits (Mwangi, 2006). These give rise to competency traps, where successful organisations are less likely to seek change than unsuccessful ones (Booth, 2003).

Greener (2002, p. 614) defines path dependency as follows:

*While early on in an organisational or market history a number of different paths may be equally possible and probable, once a given path has been laid, each subsequent decision is at least influenced by, and probably reinforces, what has gone before.*

Teece, Pisano and Shuen's (1997) observation strikes resonance with Greener (2002) when they affirm that the current position of a firm is often shaped by the path it has travelled. According to Greener (2002, p. 618), "the concept provides us with a compelling description of how history comes to be embedded within organisations ..."; it recognises that 'history matters' (Teece *et al.*, 1997). In other words, we cannot understand today's choices without tracing their evolution through time. Mahoney (2000) warns against defining path dependency as nothing more than the vague notion that 'history matters', or that 'the past influences the future'. Such general definitions, so argues

Mahoney (2000, p. 507), “have led scholars inappropriately to understand path dependency as a form of analysis that simply traces outcomes back to temporally remote causes”. Sydow *et al.* (2009) agree with Mahoney (2000) that, while organisational processes are imprinted by their history in a way, if we base path dependency explanations on the history matters argument, such an all-embracing approach would bring us closer to a truism. Further, ‘history matters’ is too broad an assertion and can cause misunderstandings.

### **Evolution of Path Dependency**

Path dependency is an aspect of the RBV theory that is under-theorised and under-served empirically, hence the motivation for this research. The concept has its roots in the works of Paul David (1985) and Brian Arthur (1989) who assert that sub-optimal, or inefficient technologies, can become ‘locked-in’. David’s (1985) best-known work in this area is his discussion of the layout of the QWERTY typewriter keyboard, and Arthur’s (1989) most popular example concerns the struggle for supremacy over VCR (Video Cassette Recorder) format. The two authors concluded that, “the commercial success of the QWERTY keyboard and the VHS (Video Home System) tape format were dependent on their particular historical paths and was not a simple reflection of product optimality or superiority” (Barnes, Gartland & Stack, 2004, p. 371).

The concept of path dependency was first used by economists to explore the technological process, and was associated with increasing returns processes (David, 1985). It was initially applied to account for the phenomenon of persistent domination by inferior technologies in competitive markets, despite the availability of a superior rival (Nee & Cao, 1999). According to Foray (1997), the mode of development of a technology is strongly influenced by initial conditions which put a system on a path that cannot be left without some costs. Thus technological variants having unique properties may be lost and never properly explored – the long run effect is that the scope for future developments will be narrowed (Foray, 1997).

Later on the concept was adapted by political scientists (Pierson, 2000), and specialists in organisation theory (Zukowski, 2004). These institutional

theorists extended the concept to account for both the continuity in institutional change, and the variability of institutional environments. Empirically the concept is embodied in the persistence of long-standing institutional arrangements, despite attempts to change them. The explanation, according to Nee and Cao (1999, p. 800), is that “institutions persist over time not only for reasons of legitimacy, but because powerful individuals and groups have a vested interest in maintaining the status quo”.

### **Causes of Path Dependency**

Page (2006) posits that literature on path dependency reveal four related causes: increasing returns, self-reinforcement, positive feedbacks, and lock-in. Another cause, not articulated by Page (2006), is sensitivity to initial conditions which is associated with chaos theory (Potgieter, April, Cooke & Osunmakinde, 2009). The researcher will first examine this cause of path dependency below.

#### ***(i) Sensitivity to Initial Conditions and Chaos Theory***

Sensitivity to initial conditions means that the characteristics of organisations tend to reflect how things were at the time of the founding of the organisation. Small events trigger shifts in the course of events, and this leads to positive or negative consequences that move the system away from its systematic course. Initial conditions can have an enduring effect on the structure and behaviour of organisations over the long run (Zyglidopoulos, 1999). Liebowitz and Margolis (1995, p. 206) argue that, “... historical accidents may have left us with the wrong types of automobiles, video recorders and typewriter keyboards”.

As discussed above, a famous example of initial conditions used to explain path dependency in the literature include the establishment of such technologies as the VHS video recorder (David, 1985). Foray (1997) posits that the VHS format was adopted as the VCR industry standard despite the technical superiority of the more compact Sony Betamax, due to the interplay of seemingly unrelated background conditions and events. Prominent among these, were the incidental ability of the VHS cassette initially to carry a tape

with a longer playing time, and the creation of a complementary product – the pre-recorded tape (Foray, 1997). These introduced a self-reinforcing mechanism of positive feedbacks which gave rise to consumption externalities. According to Goulielmos (2005, p. 538), “... as more (VHS format VCRs) sold, more people wanted to buy them” and this ensured the superiority of the VHS in terms of market share. Thus, we see how small historical chance events/accidents can have durable effects. This reinforces the point that technologies and organisational formats do not exist isolated from their uses and users, and social programmes and institutions do not emerge accidentally (Schwartz, 2004).

According to Zyglidopoulos (1999, p. 246), initial environmental conditions can mould and constrain the organisation’s behaviour during the subsequent stages of its lifecycle:

*The initial stage entails a learning process that results in decision making patterns, an authority structure, and rules and procedures that are relatively permanent and evoke pressure toward organizational inertia.*

### Chaos and Complexity

One random event can select a particular path; the choice becomes locked in, regardless of the advantage of the alternative (Goulielmos, 2005). This sensitivity to initial conditions is accompanied and motivated by a mathematical literature known as chaos theory, or complexity models (Liebowitz & Margolis, 1995). Chaos theory is the study of complex, non-linear, dynamic systems (Levy, 1994; Potgieter, April, Bishop, 2005). According to Thiétart and Forgues (1995), from tomorrow’s weather, water turbulence, jet engine gas propulsion to demographic evolution, economic cycles and stock market evolution, systems seem to be governed by relationships which dynamically interact with one another and are prone to chaotic behaviour (Peter, de Lange, Musango, April & Potgieter, 2009). In this theory, chaos is not used in the popular sense of total randomness, or disorder, but have order but just with no long-term predictability. Chaos and order are not as we have always thought them to be – opposites from which

to choose (Eijnatten & Putnik, 2004). Rather, they are complementary aspects of a singular reality.

Although the researcher has attempted to articulate chaos theory below, the mathematical variant is removed from our present concern. However, it is the promise of finding a fundamental order and structure behind complex events that explains the great interest chaos theory has generated in so many fields (Levy, 1994). In the field of complexity theory, chaos is a particular mode of behaviour. Chaos refers to systems which display behaviour which though it has certain regularities, defies prediction (Rosenhead, 1998).

### *Complexity Theory and Organisations*

Holland (1995) argues that remedies in management practice that are based on the positivist view are limited by their dependence on inappropriate assumptions. Complexity theory has therefore been advanced to challenge the traditional management assumptions by embracing non-linear dynamic behaviour of systems (Potgieter, April & Bishop, 2005). Stacey (1992), and Cunha and Cunha (2006), explain the essence of complexity theory. They argue that complexity theory suggests that systems are vital and creative when they are at the 'edge of chaos' (Stacey, 1992), i.e., in a state that includes both order and chaos. Secondly, complexity theory shows how the behaviour of complex systems results from the interactions of many agents at multiple levels following simple rules (Potgieter *et al.*, 2005).

Third, as complex adaptive systems, organisations are sensitive to their environments and respond to these environments, co-evolving with them (Cunha & Cunha, 2006). Fourth, complex systems are, to a great extent, self-organising but that self-organisation is the outcome of the interdependences among individual agents following their own set of rules (Stacey, 1995).

Cunha and Cunha (2006) and Valle (2000) explain the structure of complex adaptive systems as follows:

- (i) a large number of similar, but independent, elements or agents.

- (ii) persistent movement and responses by these elements to other agents.
- (iii) adaptiveness, so that the system adjusts to new situations to ensure survival.
- (iv) self-organisation, in which order in the system forms spontaneously. Self-organising complex systems cannot be predicted and do not observe the principle of additivity, i.e., their components cannot be divided up and studied in isolation.
- (v) local rules exist that apply to each agent.
- (vi) progression in complexity, so that over time the system becomes larger and more sophisticated.

Rather than designed processes, organisations can alternatively be viewed as interactive, iterative, emergent, self-organising processes (Cunha & Cunha, 2006; Potgieter *et al.*, 2009). They have become what they are as a result of myriad interactions occurring inside the organisation and its environment. To this extent, organisations adapt through response and interaction, rather than through analysis and reflection (Cunha & Cunha, 2006).

### *The Organisation as a Chaotic System*

Earlier research on organisational analysis was done by Burns and Stalker (1961). They proposed a contingent relationship between formal structure and organisational performance, arguing that organisations with a mechanistic structure (bureaucracy) were more suitable for static environments, while those with organic structures or loosely coupled networks of workers, were more suited for dynamic environments.

Chaos theory and properties of chaotic systems are increasingly being used as an alternative approach to understanding how organisations work. The science of chaos provides a new paradigm where two apparently irreconcilable visions of management – rational and quasi-mechanistic on the one hand, and unexpected and unpredictable order on the other – can be reconciled (Thiétart & Forgues, 1995; April, Macdonald & Vriesendorp, 2000). According to McBride (2005), chaos theory is that part of complexity theory

which concerns itself with non-linear dynamic systems, and whose behaviour does not follow clearly predictable and repeatable pathways. An organisation is presented as an open, dynamic, non-linear system subject to internal and external forces which might be sources of chaos (Thiéart & Forgues, 1995). Complex adaptive systems exhibit complex behaviours because they align with diverse environments through interaction and appropriate response, rather than detached analysis and planning (Cunha & Cunha, 2006; Potgieter *et al.*, 2005). Reality is more complex, interactive and dynamic than the way it is treated through most static and detached theories. It contains elements of rationality, formality and order mixed with intuition, informality and disorder (Thiéart & Forgues, 1995).

Thiéart and Forgues (1995) further argue that chaos, i.e., a seemingly random, yet deterministically driven behaviour, has organising attributes – what Bohm (1980) termed an ‘implicate order’. These organising attributes result from multiple interactions between forces of stability and forces of instability that the system is subjected to. To that extent, although social systems are constituted through non-linear interaction, they are neither random nor chaotic, but well structured and robust (Cilliers, 2006; Potgieter *et al.*, 2009).

According to chaos theory, some forces push the system toward stability and order. These include the forces of planning, structuring and controlling (Thiéart & Forgues, 1995). According to Pascale (1999), equilibrium is concealed inside strong values or a coherent, close-knit social system, or within a company’s well-synchronised operating system (often referred to as ‘organisational fit’). Stacey (2007), however, asserts that the true dynamism of the system is concealed in the constructions of power within the organisation, and is not as well-synchronised as we may want to believe. However, Pascale (1999) does concede that nothing novel can emerge from systems with high degrees of order and stability. Enduring competitive advantage entails disrupting what has been done in the past and creating a new future – what Schumpeter (1942) described as ‘creative destruction’, the essence of free market economies (Pascale, 1999).

In an apparent reaction to neo-classical economic models, which focus on equilibrium, Nelson and Winter (1982) propose an evolutionary perspective in economics. Their study focuses on disequilibria at the population and industry levels. They argue that any disruption of that equilibrium will reinitiate search, and in general, the search will uncover new routines superior to those in the previous equilibrium.

Government crises and other shocks to systems can destabilise a system which is in equilibria as happens when government policy or electoral changes to public institutions are revolutionary rather than evolutionary. We are currently (in November 2011) experiencing the 'Occupy Wall Street' movement, where globally people are saying 'we are the 99%', as a way of expressing their intolerance to corruption and greed of the 1%. This movement was motivated by the Arab Spring – a wave of demonstrations that occurred in the Arab world beginning December 2010. The demonstrations resulted in the overthrow by citizens of oppressive regimes such as Tunisia, Egypt and Libya. Thus, social and political/government shocks can disturb a system which is in equilibria. Other (in 2011) examples of such shocks include the economic and social instability in Zimbabwe, and the electoral changes that took place in Greece.

Chaos theory also makes the claim that some other forces push the system toward instability and disorder, out of its stable equilibrium. These are forces of innovation, initiative, incoherence, and experimentation (Thiétart & Forgues, 1995). They create demands, unintended consequences and interdependencies which are not necessarily consistent with the planned objectives (Stacey, 2007). The coupling of these forces can lead to a highly complex situation: a chaotic organisation (Thiétart & Forgues, 1995) or otherly termed as a chaordic organisation (Hock, 2000). In the zone of stability, when the system is disturbed, it returns to its initial state. However, in the zone of instability, a small disturbance leads to a movement away from the starting point, which in turn generates further divergence (Rosenhead, 1998). Systems may operate at boundaries between these zones, sometimes called a phase transition, or the 'edge of chaos' (Stacey, 1992).



Forces of instability paradoxically favour a new form of order and stability – they can become an organising device and create the conditions for a new order to come (Haynes, 2007). Order is also an unsettling force – it can lead the organisation to act incoherently with respect to the constraints it is subject to. It can create resistance to change and may be a source of chaos. Chaos can also be a source of an underlying order – chaos contains seeds of new stabilities – it is an organising force (Bohm, 1980; Mason, 2007). Organisations are thus faced with two contradictory choices – let chaos develop because it is the only way to find new forms of order, but not too much because it can be a source of disruptive chaos.

### *Properties of Non-linear Dynamic Systems*

Thiétart and Forgues (1995) argue that a non-linear dynamic system has three types of equilibrium. On the one hand, when the system is directed by negative feedbacks, which dampen the influence of variables, after a change, the system always comes back to its initial state (Thiétart & Forgues, 1995). This is the first type of equilibrium – stability. The second type of equilibrium is when the system is driven by positive feedbacks, which reinforce the original change made in one of its variables (Mason, 2007). This leads to a second type of equilibrium – explosive instability. The third type of equilibrium occurs in the simultaneous presence of counteracting forces – positive feedbacks which tend to reinforce the initial change and increase instability and negative feedbacks which dampen the original change and tend to increase stability (Mason, 2007).

A system can therefore reach a stable equilibrium or point attractor (Haigh, 2002). We can also observe a form of periodic stability (periodic attractor) where the system periodically comes back to its previous state (Thiétart & Forgues, 1995). Finally, the behaviour can be completely erratic or be contained within a strange shaped surface, dubbed strange attractor (Bloch, 2005; Thiétart and Forgues, 1995). In this situation there is a sensitive dependence to the initial conditions, i.e., a small initial change has an unexpected and important impact (Bloch, 2005; Thiétart & Forgues, 1995). The behaviour is said to be chaotic. Thus the state of the system – chaotic or

stable – depends on the dynamic combination and relative strength of the relationships among its various elements (Thiétart & Forgues, 1995).

### *Principles of Chaos Theory*

According to Thiétart and Forgues (1995) and Schneider and Somers (2006), chaos theory presents organisations as non-linear dynamic systems subject to forces of stability and forces of instability which push them towards chaos. Processes appear to proceed according to chance even though their behaviour is in fact determined by precise laws (Mason, 2007). Chaos theory has been described as the qualitative study of unstable aperiodic behaviour in deterministic non-linear dynamical systems (Valle, 2000; Haigh, 2002). According to Valle (2000), by aperiodic is meant that the system does not repeat itself while dynamical means that the system changes over time. Although chaotic behaviour is complex, it has simple rules (Mason, 2007; Beinhocker, 1997). The characteristic of non-linearity in chaotic systems means that the output of the system is not proportional to the input (Valle, 2000) while the characteristic of chaotic systems being deterministic means that chaotic behaviour is not random (Valle, 2000).

When in a chaotic domain, organisations are likely to exhibit the qualitative properties of chaotic systems such as iteration, sensitivity to initial conditions, bifurcation processes, attraction to specific configurations, time irreversibility, and self-organisation (Thiétart & Forgues, 1995). Collectively these principles explain what it means for a system to be dynamical, non-linear, deterministic and unstable (Arrigo & Barrett, 2008).

### *Iteration*

Iteration refers to the process of repetition – the output of the system is used as input in the next calculation. It is feedback that involves continual re-absorption of what has come before (Arrigo & Barrett, 2008; Mason, 2007). According to Arrigo and Barrett (2008, p. 170), “Systems prone to chaos tend to stretch and fold back upon themselves in self-reinforcing loops”. The system will continually build upon itself, never repeating or following the exact

same path twice. Unlike linear dynamic systems, non-linear iterative systems are highly unpredictable.

### *Initial Conditions*

According to Arrigo and Barrett (2008), non-linear dynamic systems can be significantly affected by what may seem to be very minute variables or inputs. Thus a small initial change in one variable can lead to a dramatically different evolution or can have monumental consequences (a big effect), consequences which could not have been predicted beforehand (Manson, 2001; Thiétart & Forgues, 1995). In this regard, one simple creative breakthrough can evoke a cascade of increasing complexity. Simple inventions such as the wheel, printing press, or transistor led to complex offshoots such as automobiles, cellular phones, electronic publishing, and computing, so argues Pascale (1999). The popular expression of this concept of initial conditions is the so-called 'butterfly effect' – i.e., something as small as a butterfly flapping its wings can theoretically alter the behaviour of an entire weather system (Manson, 2001). The implication of this conception is that weather patterns are so complex, the argument runs, that a butterfly flapping its wings today on one side of the globe could cause tiny changes in air pressure which could induce a torrential downpour on the other side of the globe at some future point (Roe, 1996). In this regard, organisational growth and its future state are vulnerable or highly sensitive to the founding conditions.

In chaotic systems small disturbances multiply over time because of non-linear relationships (Levy, 1994). As a result, because such systems are extremely sensitive to initial conditions, this makes forecasting very difficult. Thiétart and Forgues (1995, p. 21) agree: "... when in a chaotic state, the impact of a variable change can be predicted only for the very short term" – a characteristic that makes long term forecasting impossible. This is a problem that has confronted meteorologists trying to model the weather.

### *Bifurcation*

The term is used to describe critical points in the evolution of chaotic systems. To reach a state of chaos, a system will progress from stability, through diverse degrees of disorder, ending in the chaotic domain (Arrigo & Barrett, 2008). Each change from one state of stability to the next is a bifurcation and each functions as a critical point of destabilisation (Eidelson, 1997; Arrigo & Barrett, 2008). Ward (1995, p. 631) concurs: "When a system is pushed further and further from its steady state by internal and external environmental change, it may reach a threshold beyond which it cannot recover". If the degree of disorder becomes excessive, the system is unable to maintain its stability, reaching a critical value in which it succumbs to a behavioural transformation (Arrigo & Barrett, 2008; Eidelson, 1997). At this juncture – bifurcation – two or more steady states, different from the first, become available to the system.

Bifurcations mark qualitative changes in the behaviour of a system that accompany its evolution into disorder and chaos (Arrigo & Barrett, 2008). The passage, or bifurcation, from stable equilibrium to periodic behaviour to chaos, takes place when the strength of the link between variables changes (Thiéart & Forgues, 1995). Thus the movement of a system from order to disorder, to chaos suggests that at some point its behaviour succumbs to randomness and unpredictability (Arrigo & Barrett, 2008).

### *Strange Attractors*

Attractors are the rules and logics that create some order and replication within a system (Haynes, 2007). Chaotic systems which dissipate their energy may get organised around structures called strange attractors (Mason, 2007). They are behavioural patterns of stability. An attractor is a region which exerts a magnetic appeal for a system, seemingly pulling the system toward it (Arrigo & Barrett, 2008; Haigh, 2002). They create a semblance of order, rather than perpetual chaos (Haynes, 2007). Strange attractors are a local minimum or maximum around which a system seems to stay for a certain period of time in quasi-equilibrium (Haigh, 2002).

Chaos theory speaks of attractors rather than control mechanisms. Attractors may be visualised as magnets that exert a pull on the system (Ward, 1995). The apparent random behaviour gets attracted to a given space and remains within limits. Attractors thus create an implicit order within chaos. They offer the potential for periods of time when there is relative stability within complexity (Haynes, 2007). Attractors wield their influence on social phenomena like the organisation of graffiti artists or gang members (Arrigo & Barrett, 2008). The strange attractor is relevant for charting the behaviour of complex adaptive systems.

### *Time Irreversibility*

The fifth characteristic of chaotic systems is that of time irreversibility, ie the probability to see a system 'reverse' to its initial state is extremely low. Once in a state of chaos, the system will probably not find itself again in the same situation in the foreseeable future (Thiéart & Forgues, 1995). In an organisation, it is unlikely that the same action, taken twice, will lead to the same result (Thiéart & Forgues, 1995). To this extent, actions which once produced excellent results might lead one day to failure.

### *Self-organisation*

This is the ability of systems to organise themselves out of apparent disorder. Self-organisation is when an organisation is able to discover, through experimentation, answers to its problems (Thiéart & Forgues, 1995). Since prediction is difficult in this situation, the organisation develops a catalogue of responses and stimulates learning opportunities through multiple experiments (Thiéart & Forgues, 1995). The structure that emerges through self-organisation grows out of an interaction between systems parts and between the system and its environment (Lichteinsten, 2000; Ward, 1995). The pattern of behaviour of the system evolves or emerges from the local interaction of the agents within it (Burnes, 2005). An example of self-organising properties of complex adaptive systems are flocks of birds, where there is no single, organising, bird leader (Ashmos, Duchon & McDaniel Jr., 2000). Rather, a pattern of organisation develops from local interactions among agents, apparently following simple order-generating rules (Ashmos *et al.*, 2000;

Beinhocker, 1997). In the example given above, each bird follows simple rules of interaction:

- (i) *Keep a minimum distance from other birds, for example, stay 20cm away from its two neighbours.*
- (ii) *Fly at the same speed as other birds.*
- (iii) *Move towards the centre of the flock (Burnes, 2005, 80).*

The benefit of self-organising is a structure that is fluid and sensitive to the needs of connected elements (Ashmos *et al.*, 2000).

### Chaos Theory as a New Perspective

Burnes (2005, p. 76) argues that "...a sufficient body of academic work has been amassed to allow those studying organizations to recognise the potential of complexity theories". The qualitative properties of chaos theory can offer a new perspective from which to view the way organisations work (Thiétart & Forgues, 1995). The theory promises to be a useful conceptual framework that reconciles the essential unpredictability of organisations with the general emergence of distinctive patterns (Levy, 1994). Thiétart and Forgues (1995) conclude that chaos theory needs to be further researched because the qualitative properties of the theory have interesting insights. According to Levy (1994), by conceptualising organisations as chaotic systems, chaos theory points to the importance of developing guidelines and decision rules to cope with complexity and of searching for non-obvious and indirect means to achieving goals (Manson, 2000). In fact, the attractiveness of complexity has been amplified by environmental uncertainty (Smith & Graetz, 2006).

Chaos theory is congruous with the post-modern paradigm, which questions deterministic positivism as it acknowledges the complexity and diversity of experience (Levy, 1994). However, according to Levy (1994), its application has been constrained by the fact that it has developed in relation to physical systems, without taking into account fundamental differences between physical and social systems. While physical systems are shaped by

unchanging natural laws, social systems are subject to intervention by individuals and organisations. Svyantek and Brown (2000) have advised that in studying organisations as complex systems, researchers are required to take a historical, in-depth and context specific approach. This research follows this advice by looking at whether the development of the University of Rhodesia was path dependent.

Levy (1994) and Manson (2000) posit that people involved in planning have always known that models are always just models, that forecasts are uncertain, and that uncertainty grows over time. To this extent, the proliferation of joint ventures and acquisitions by large companies of stakes in other enterprises can be understood as attempts to keep a foothold in a number of potential scenarios in the face of uncertainty and accelerating change (Levy, 1994).

### ***(ii) Increasing Returns***

This is the second cause of path dependency. Pierson (2000) and Choi, Millar, Chu, and Berger (2007) call increasing returns self-reinforcing or positive feedback processes. Increasing returns magnify the significance of consequences of unexpected or accidental occurrences. They capture two key elements central to path dependency. Firstly, they pinpoint how the costs of switching from one alternative to another will increase markedly over time (Pierson, 2000). Secondly, they draw attention to issues of timing and sequence. Each step along a particular path produces consequences which make that path more attractive for the next round (Pierson, 2000). Increasing returns means that the costs of switching from one setting to another increase over time (Lamberg, Pajunen, Parvinen & Savage, 2008). As such effects begin to accumulate, they generate a powerful cycle of self-reinforcing activity. This means that “the more a choice is made or an action is taken, the greater its benefits” (Page, 2006, p. 88). Increasing returns can cause the economy “gradually to lock itself in to an outcome not necessarily superior to alternatives, not easily altered, and not entirely predictable in advance” (Arthur, 1989, p. 128). Arthur (1994) outlines some of the characteristics of increasing returns:

*Unpredictability* – because early events have a large effect and are partly random, many outcomes may be possible. We cannot predict ahead of time which of these possible end-states will be reached.

*Inflexibility* – The further into the process we are the harder it becomes to shift from one path to another.

*Non-ergodicity* – Accidental events early in a sequence do not cancel out. They cannot be treated as ‘noise’ because they feed back into future choices.

*Potential path inefficiency* – the outcome that becomes locked-in may generate lower pay-offs than a forgone alternative would have.

Arthur (1994) suggests that four features of a technology and its social context generate increasing returns:

*Large set-up or fixed costs* – With large production runs, fixed costs can be spread over more output, which will lead to lower unit costs.

When set-up or fixed costs are high, individuals and organisations have a strong incentive to identify and stick with a single option. Balmann, Odeng, Weikard and Brandels (1996, p. 163) agree: “If a firm for example, has already invested in a plant, this plant cannot be sold at the same price even if it has not been used”.

*Learning effects* – With repetition, individuals learn how to use products more effectively, and their experiences are likely to spur further innovation in the product or related activities.

*Co-ordination effects* – These occur when the benefits an individual receives from a particular activity increase as others adopt the same option. If technologies embody positive network externalities, then a given technology will become attractive as more people use it (Choi *et al.*, 2007). Increased use of a technology encourages investments in the linked infrastructure, which in turn attracts still more users to the technology. With increasing returns a firm can benefit from maintaining the level and quality of its strategy – the adoption of new kinds of strategic activities would mean rising co-



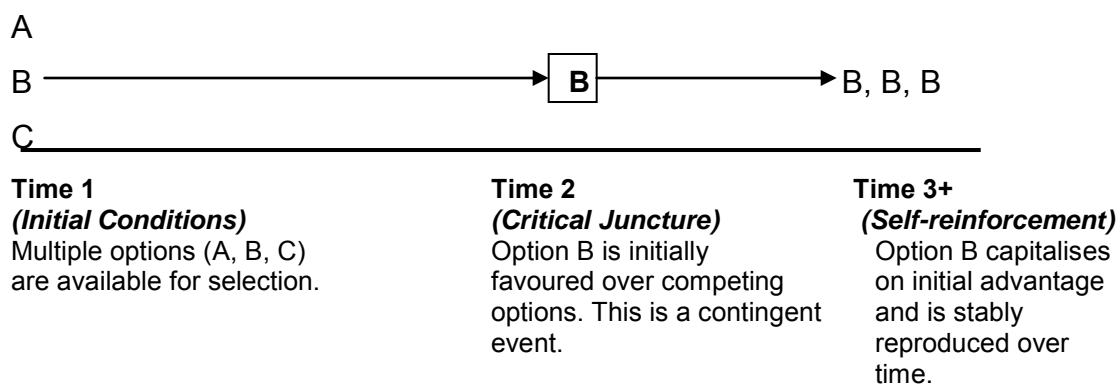
ordination and physical costs whereas the continuation of 'doing the same' reduces these costs.

*Adaptive expectations* – If options that fail to win broad acceptance will have drawbacks later on, then individuals may feel a need to 'pick the right horse'. Although arguments about technology are probably the best known, economists have applied similar analyses of increasing returns processes to a range of economic contexts. Agglomeration effects, where initial centres of economic activity may act like a magnet and influence the locational decisions and investments of other economic actors, is one such context (Pierson, 2000). Established firms attract suppliers, skilled labour, specialised financial and legal services and appropriate physical infrastructure (Pierson, 2000). This context of increasing returns helps to explain the prevalence of pockets of specialised economic activity in Silicon Valley.

### ***(iii) Self-reinforcement***

Self-reinforcement means that "making a choice or taking an action puts in place a set of forces or complementary institutions that encourage that choice to be sustained" (Page, 2006, p. 88). According to Arthur (1994, p. 93), although a standard itself may not improve with time, "widespread adoption makes it advantageous for newcomers to a field – who must exchange information or products with those already working there – to fall in with the standard". Mahoney (2000, p. 512) posits that in sequences that have self-reinforcing properties, "initial steps in a particular direction induce further movement in the same direction such that over time it becomes difficult or impossible to reverse direction".

With self-reinforcing sequences, periods of institutional genesis correspond to 'critical junctures'. Critical junctures are characterised by the adoption of a particular arrangement from among two or more alternatives (Mahoney, 2000). These junctures are 'critical' because once a particular option is selected, it becomes progressively more difficult to return to the initial point when multiple alternatives were still available (Mahoney, 2000). Mahoney (2000) provides an illustration of a self-reinforcing sequence.

**Figure 3.5: Illustration of Self-reinforcement**

Adapted from Mahoney (2000, p. 514)

**(iv) Positive Feedbacks/Externalities**

Svyantek and Brown (2000) define positive feedback as the supportiveness of an environment for a particular behaviour or outcome. Sterman and Wittenberg (1999) argue that through positive feedback, a successful paradigm alters its environment by suppressing the creation of competitors and rapidly starving any that do emerge of the resources they would need to succeed. Network externalities induce persistence, i.e., there is an advantage to using a dominant choice when it is the one with which players are most familiar (Becbchuck & Roe, 1999). Put differently, “an action or choice creates positive externalities when that same choice is made by other people” (Page, 2006, p. 88). According to Liebowitz and Margolis (1994), network externalities arise when the utility that a user derives from consumption of the good increases with the number of other agents consuming the good. Foray (1997, p. 743) is in agreement:

*The individual selection of an option leads to positive feedbacks in the sense that it heightens the performance of this option from the viewpoint of those who have already chosen it and increases the likelihood of the same choice recurring.*

Arthur (1994, p. 81) describes positive feedback as “an important new theory about how small chance events early in the history of an industry or

technology can tilt, forever, its competitive balance". It explains a situation in which once random economic events select a particular path, the choice may become locked in, regardless of the advantages of the alternative (Arthur, 1994).

Goodstein (1995) posits that technological progress can proceed along a variety of paths: once a path is chosen, however, positive feedback mechanisms (scale economies, R&D commitments, complementary investments, increasing consumer acceptance) lock society into that path. Thus technologies typically improve as more people adopt them and firms gain experience that guide further development (Arthur, 1994). This positive feedback link is explained by the fact that the more people adopt a technology, the more it improves and the more attractive it is for further adoption. Arthur (1994, p. 82) uses the example of the history of the video-cassette recorder to explain how a small gain in market share would improve the competitive position of one system and helped it to further increase its lead:

*The VCR market started out with two competing formats selling at about the same price: VHS and Betamax. Each format could realize increasing returns as its market share increased: large numbers of VHS recorders would encourage video outlets to stock more pre-recorded tapes in VHS format, thereby enhancing the value of owning a VHS recorder and leading more people to buy one.*

It would have been impossible at the outset of the competition to say which system would win. Thus if the claim that Betamax was technically superior is true, then the market's choice did not represent the best economic outcome (Arthur, 1994). This is so because small random events can accumulate and become magnified by positive feedbacks so as to determine the eventual outcome (Arthur, 1994). Sterman and Wittenberg (1999, p. 333) explain further:

*Chance events or microscopic noise can perturb the system sufficiently to shift the advantage to a previously weaker rival. The positive feedbacks then amplify these small initial differences to macroscopic significance. Once a dominant design has emerged the costs of switching become prohibitive.*

Arthur (1994) provides another illustration to explain positive feedback. According to him:

*In the early 1970s Japanese automobile makers began to sell significant numbers of small cars in the US. With little opposition from Detroit, its engineers and production workers gained experience, costs fell and quality improved – positive feedback which helped companies to make serious inroads into the US market for small cars (Arthur, 1994, p. 89).*

Choi *et al.* (2007) call this positive feedback, ‘social herding’. Social herding occurs when a consumer’s choice depends on the decisions of others, helping to accelerate the process of critical mass build-up, social lock-in effects and increasing returns. It is like fashion – choice is dependent on what is *en vogue*. The authors have argued that a consumer’s choice depends on the decisions of others – the sheer numbers of firms and customers adopting a network in the early stage, creates a pressure causing others to adopt this network in the later stage (Choi *et al.*, 2007).

Katz and Shapiro (1985) draw a distinction between direct and indirect network externalities. Direct network externalities are those generated “through a direct physical effect of the number of purchasers on the quality of the product” while indirect network externalities involve “instances that lack that direct physical effect” (Katz & Shapiro, 1985). Examples of indirect network externalities include software being more plentiful and lower in price as the number of computer users increases. Also availability of post-purchase service for durable goods – generally a situation in which complementary goods become more plentiful and lower in price as the number of users of the good increases.

**(v) Lock-in**

Lock-in is a hard-to-escape situation. According to Page (2006, p. 88), “lock-in means that one choice or action becomes better than any other one because a sufficient number of people have already made that choice”. Teece *et al.*, (1997, pp. 522-23) agree: “by making specific investment decisions, or by developing specific product or market knowledge, or by establishing a repertoire of specific routines, firms and other actors limit and structure possibilities of future actions open to them”. This process is described as lock-in by historical events whereby “companies with the best products will not always win, as chance events may cause ‘lock-in’ on inferior technologies and may even in special cases generate switching costs for consumers” (Teece *et al.*, 1997, p. 523). This process can lead to inferior technologies and institutions gaining ascendancy simply because they ‘took off’ first’ (Arthur, 1989). Thus a technology that improves slowly at first but has enormous long-term potential could easily be shut out, locking the economy into a path that is both inferior and difficult to escape (Arthur, 1994).

Cowan (1991) identifies two distinct forces driving the system to lock-in to one technology. The first is the reduction of uncertainty – when the adoption process begins, the merits of neither technology are well-known. However, early use of the technology reduces uncertainty, causing lock-in to occur (Cowan, 1991). The second mechanism driving lock-in is increasing returns. In the early stages of the competition, as technologies are tried out, inevitably one of them will be used more frequently than the other. As this occurs, the more-used technology advances along its learning curve more quickly, and the other technology gets left behind (Cowan, 1991). It becomes more and more costly to shift away from the more-used technology, causing lock-in to occur. Once one variant predominates, each further adopter only reinforces the lock-in (Witt, 1997).

A modern example of technological lock-in can be found in the new productivity upgrade from Microsoft Office 2003. In order to get the full functionality from Office 2003, a user must also adopt Microsoft server technology and architecture (Barnes, Gartland & Stack, 2004). A user who

has made this adaptation is locked-in and competitors such as Sun and Oracle locked-out (Barnes *et al.*, 2004).

### *Behavioural Lock-in*

According to Barnes *et al.* (2004), most essays on path dependency have focussed on technological lock-in. The authors have proceeded to introduce *behavioural lock-in* to explain the behaviour of an agent stuck in some sort of inefficiency or sub-optimality due to habit, organisational learning, or culture (Barnes *et al.*, 2004). They elaborate:

*Once a product has become established as an industry standard, and once consumers or users have invested time or money in learning a particular system or becoming comfortable with a traditional practice, they will be less likely to try a rival process, even if over time it proves superior (Barnes et al., 2004, p. 372).*

To that extent, sometimes consumer utility depends not on how good a product is but on how many people use the product: popularity may prove more important than usefulness or effectiveness (Barnes *et al.*, 2004).

Pierson (2000) analyses behavioural lock-in in politics by explaining how institutional influence can habituate economic actors over time into particular behaviour. According to him:

*Institutions frequently provide incentives that encourage individuals to act in ways that lock-in a particular path of policy development, creating societal commitments that may be quite difficult to reverse (Pierson, 2000).*

In support of this concept of behavioural lock-in, Barnes *et al.* (2004, p. 373) explain how in the U.S., “due in part to financial market pressure, managers and other organizational leaders tend to focus on short-term profitability rather than longer-run growth and firm survival”.

Bridges (2000) launches a fierce critique of Pierson (2000) for attempting to naturalise path dependency from its natural birthplace in economics to the quite different setting of political science, history and sociology. This is because the social process at the centre of economics (the market) does not have counterparts elsewhere (Bridges, 2000) – path dependency in its new environment is just not the same (Bridges, 2000).

Professionals can also display behavioural lock-in. Professional groups set highly complex standards and practices that govern their interactions with their peers. If new standards and practices threaten to disrupt these interactions and professional boundaries, professionals tend to resist (Barnes *et al.*, 2004). One example concerns the continued use by American physicians of paper rather than electronic medical records (Barnes *et al.*, 2004). The key explanatory variable in behavioural lock-in is that “once a particular behaviour is embedded in organizations, a strong *status quo* inertia may discourage other behaviour. It takes tremendous effort to change, and individuals may simply be uninterested (even when they suspect it is necessary)” (Barnes *et al.*, 2004, p. 373). In the same vein, consumers may develop deep-seated attachments to particular types of products, even if there are better or cheaper alternatives available (Barnes *et al.*, 2004).

## **Features of Path Dependency**

### ***Sequences in Path Dependency***

#### *Self-reinforcing Sequences*

Mahoney (2000) argues for two types of sequences within the path dependency framework – self-reinforcing sequences and reactive sequences. Self-reinforcing sequences are characterised by the formation and long-term reproduction of a given institutional pattern – what economists call ‘increasing returns’. The logic of increasing returns has been used to explain the persistence of several potentially inefficient technologies, including types of typewriter keyboards, video recorders, railroad gauges and televisions (Mahoney, 2000). Mahoney further explains that, “With increasing returns, an institutional pattern, once adopted, delivers increasing benefits with its continued adoption and over time it becomes more and more difficult to

transform the pattern or select previously available options, even if these alternatives would have been more efficient” (Mahoney, 2000, p. 508). In sequences that have self-reinforcing properties “initial steps in a particular direction induce further movement in the same direction such that over time it becomes difficult or impossible to reverse direction” (Mahoney, 2000, p. 512).

Mahoney (2000) takes the discussion further by stating that with self-reinforcing sequences, periods of institutional genesis correspond to ‘critical junctures’. These junctures are ‘critical’ because once a particular option is selected, it becomes progressively more difficult to return to the initial point when multiple alternatives were still available (Mahoney, 2000). Critical junctures are often assessed through counterfactual analysis in which “investigators imagine an alternative had been selected and attempt to rerun history accordingly” (Mahoney, 2000, p. 513). Investigators consider a counterfactual antecedent that was actually available during a critical juncture period and that, according to theory, should have been adopted (Mahoney, 2000). According to Mahoney (2000, p. 513), “such experiments can illustrate the importance of a critical juncture by showing that the selection of an alternative option would have led to a dramatically different final outcome”. Selection processes during a critical juncture are marked by contingency – the inability of theory to predict or explain the occurrence of a specific outcome (Mahoney, 2000).

### *Reactive Sequences*

With reactive sequences, “each event within the sequence is in part a reaction to antecedent events, and a cause of subsequent events” (Mahoney, 2000, p. 526). The final event of the sequence depends on the occurrence of the first event. According to Mahoney (2000), whereas self-reinforcing sequences are characterised by processes or reproduction that *reinforce* early events, reactive sequences are marked by processes that *transform* and perhaps reverse early events.

Mahoney (2000) argues that with a reactive sequence, it is not self-evident how one should conceptualise the starting point of the sequence because that



decision may seem arbitrary. Thus the investigator is prone to keep reaching back in time in search for foundational causes. However, without criteria for identifying a meaningful beginning point, the investigator can easily fall into the trap of infinite regress – perpetual regression back in time to locate temporally prior causal events (Mahoney, 2000).

### ***Remedial and Non-remedial Path Dependency***

Liebowitz and Margolis (1995) distinguish between remedial and non-remedial path dependency. Non-remedial path dependency occurs if there are no feasible improvements in the path, either now or in the past. With hindsight, we wish that some other alternative had been chosen. They argue that the only kind of path dependency with major ramifications is path dependency that is potentially remediable.

### ***Definitional Features of Path Dependency***

In his conceptualisation of path dependency, Mahoney (2000) suggests that path-dependent analyses have three definitional features. First, “path-dependent analysis involves the study of causal processes that are highly sensitive to events that take place in the early stages of an overall historical sequence” (Mahoney, 2000, p. 510). Earlier paths of a sequence matter much more than later parts – an event that happens ‘too late’ may have no effect although it might have been of great consequence if the timing had been different (Mahoney, 2000). The second definitional feature of path-dependent analysis, according to Mahoney (2000, p. 511), is that “early historical events are contingent occurrences that cannot be explained on the basis of prior events or ‘initial conditions’”. Finally, the third feature is that “once contingent historical events take place, path-dependent sequences are marked by relatively deterministic causal patterns or ‘inertia’ – i.e., once processes are set in motion and begin tracking a particular outcome, these processes tend to stay in motion and continue to track this outcome” (Mahoney, 2000, p. 511).

## ***Forms of Path Dependency***

### ***Degrees of Path Dependency***

Liebowitz and Margolis (1995) examine path dependency by coming up with three different forms of the term, each having a different implication regarding market errors and lock-in. They use the market choice of VHS over Betamax to illustrate the three forms of path dependency. *First-degree path dependency* involves instances where sensitivity to starting points exists but has no implied inefficiency (Liebowitz & Margolis, 1995). According to Liebowitz and Margolis (1995), there is a common perception that Betamax was superior to VHS and that the market's choice did not represent the best economic outcome. Thus customers' choices of video-recorder formats exhibit path dependency – decisions by earlier adopters had some effect on the decisions of later adopters (Liebowitz & Margolis, 1995). In essence, “an initial arbitrary/random choice led to something significant and durable – VHS is now the dominant format for home video recording” (Liebowitz & Margolis, 1995, p. 208).

According to Liebowitz and Margolis (1995), *second-degree path dependency* involves a situation where sensitive dependence to initial conditions leads to outcomes that are regrettable and costly to change. “The inferiority of a chosen path is unknowable at the time a choice was made, but it is later recognised that some alternative path would have yielded greater wealth” (Liebowitz and Margolis, 1995, p. 207). Second-degree path dependency occurs when “an action is taken that subsequent events reveal to be inferior to some alternative” (Liebowitz & Margolis, 1995, p. 211). To illustrate this form of path dependency, Liebowitz and Margolis (1995, 208) argue that “if we claim that VHS was notably inferior as a videotaping format, that choosing VHS was a mistake”, this is second-degree path dependency.

*Third-degree path dependency* involves instances in which sensitive dependence on initial conditions leads to an outcome that is efficient – but in this case the outcome is also remediable (Liebowitz & Margolis, 1995). According to Liebowitz and Margolis (1995, p. 207), “the paths taken under first-and second-degree path dependency cannot be improved upon, given

the available alternatives and the state of knowledge". The essence of "the distinction between third-degree path dependency and the weaker forms is the availability of feasible, wealth-increasing alternatives" (Liebowitz & Margolis, 1995, p. 207).

According to Liebowitz and Margolis (1995, p. 208), "if we claim that at the beginning, sufficient information existed to determine that Betamax was superior, then we make a claim of third-degree path dependency". Similarly, "if it were widely understood today that switching to Betamax has a benefit greater than the cost, but we remain mired in the VHS standard, then it is an instance of third-degree path dependency" (Liebowitz & Margolis, 1995, p. 209). Thus third-degree lock-in occurs when agents know enough to make correct choices but fail to take advantage of the implied profit opportunities (Liebowitz & Margolis, 1995). In this regard, "third-degree path dependency is a dynamic market failure that is brought about by the persistence of certain choices" (Liebowitz & Margolis, 1995, p. 209). "Even given that everyone maximizes, individually and collectively, given their current knowledge, the wealth-maximizing path might not be chosen" (Liebowitz & Margolis, 1995, p. 212). These reasons are related to market failures: "some markets do not exist; some of the affected parties are not yet born; some economic actors cannot coordinate" (Liebowitz & Margolis, 1995, p. 212). Given that information is imperfect, it is inevitable that some durable commitments are shown to be inferior as information is revealed with the passage of time (Liebowitz & Margolis, 1995).

### ***Phases of Path Dependency***

Sydow, Schreyögg and Koch (2009) call for an elaborated framework of path dependency that differentiates three developmental phases of the concept.

- (i) *Phase I: The Pre-formation Phase* is characterised by an open situation with no significantly restricted scope of action. Several outcomes initially are possible.
- (ii) *Phase II: The Formation Phase* is characterised by the gradual emergence of an organisational path. A new regime takes the lead.

A dominant action pattern is likely to emerge, which renders the whole process more and more irreversible.

- (iii) *Phase III: The Lock-in Phase* is characterised by a further restriction of the scope. The dominant pattern gains a deterministic character, and alternative courses of action are no longer feasible for various reasons – high switching costs, sunk costs, and monopoly.

### ***Types of Path Dependency***

Roe (1996) comes up with three types of path dependency: weak-form, semi-strong form and strong-form path dependency. In a *weak-form path dependency* the original path does not have to be very strong for it to explain how we got where we are (Roe, 1996). Society can choose between two institutions and the choice becomes embedded, but the chosen institution functions as well as the one discarded would have (Roe, 1996).

The *semi-strong form path dependency* leads to inefficient paths. According to Roe (1996), had we known what we know now, we would not have made that investment. We regret the result, but will not pay to change it because the costs of change make further adaptation unwise. The QWERTY typewriter is an example of the semi-strong form of path dependency.

The third type of path dependency is the *strong-form path dependency* which is another kind of inefficient path. A road is built and it would be worthwhile to transform the road in terms of present operational costs (Roe, 1996). Change is desirable but society is stuck due to lock-in effects.

### **The Economics of QWERTY and Other Technologies**

The study of technology has provided the most fertile ground for illustrating the concept of path dependency. Because the QWERTY story is a famous example that has been used to explain the concept of path dependency, we will examine it in more detail and subject it to some critique. According to Pierson (2000), a particular technology may achieve a decisive advantage over competitors, although it may not necessarily be the most efficient alternative in the long run. This occurs because each technology generates

higher pay-offs for each user as it becomes more prevalent (Pierson, 2000). Once an initial advantage is gained, positive feedback effects may lock-in this technology, and competitors are excluded (Pierson, 2000).

The importance of path dependency is that the more technologies and products embodying those technologies become more attractive, the more they are adopted (Teece *et al.*, 1997). According to Greener (2002, p. 614), the classic example of the path-dependency phenomenon is in “the collective take-up and persistence of the QWERTY keyboard despite the existence of a technically superior alternative”. This story is the basis of the claim that the current use of the QWERTY keyboard is a market failure. According to the popular story, the keyboard invented by August Dvorak, a Professor of Education at the University of Washington, is vastly superior to the QWERTY keyboard developed by Christopher Sholes that is now in common use (Liebowitz & Margolis, 1990).

“Why does the topmost letters on your personal computer keyboard spell out ‘Qwertyuiop’, rather than something else?”, David (1985, p. 332) asks. Goulielmos (2005, p. 538) provides part of the explanation: “The QWERTY layout design was designed in that way on purpose to make it harder to type, as typists kept jamming the keys by typing too quickly”. The story of the QWERTY typewriter demonstrates how an inflexible standard for keyboard configuration was locked into place through increasing returns to scale. Boas (2007) has provided an elaborate explanation of this phenomenon. In 1867, Christopher Latham Sholes patented a typewriter design in which the printing action was hidden from view (Boas, 2007). The major disadvantage of this design was that the user would not necessarily know if a type-bar got stuck and would likely continue typing, thus repeatedly hammering the stuck letter into the paper (Boas, 2007). Sholes sought to perfect his invention by re-arranging the layout of the keys. He ultimately settled on the QWERTY configuration, which was less likely to jam because type-bars for common letter pairs would strike from different sides of the machine.

Although other typewriter designs soon became available, the QWERTY had established an early lead in the market. The QWERTY keyboard's initial popularity was crucial for its ultimate success because typists and typewriter owners each benefited from the market being dominated by a single keyboard configuration (Boas, 2007). Businesses got greater value if they owned the typewriter on which a majority of typists had been trained, and budding typists wanted to train on the machine that was most common (Boas, 2007). According to Boas (2007), once proficient on a QWERTY keyboard, typists were reluctant to re-learn the typing process on a new (and possibly more efficient) machine because of the time, effort, and minimal payoff associated with retraining on a typewriter that no one else used. For this reason, the Dvorak keyboard introduced in the 1930s never stood a chance in the marketplace against the less efficient but universally accepted QWERTY (Boas, 2007).

The QWERTY keyboard was designed to slow down typing speed but despite the obvious drawback (i.e., inefficiency) this

*... sub-optimal layout is now commonplace. Society became 'locked-in' this configuration and the invested sums came as the 'sunk costs' that prohibited it from moving to an alternative system, even if the one that was being used was clearly inferior (Greener, 2002, p. 617).*

This made David (1985, p. 332) conclude that, "Dvorak's death in 1975 released him from forty years of frustration with the world's stubborn rejection of his contribution ...". Thus "past decisions concerning technologies introduced to simplify and enable, can come to constrain and channel the organisation's present and future" (Greener, 2002, p. 617).

The clock provides another example of path dependency. According to Goulielmos (2005, p. 538):

*The format of our clocks had hands which moved counter-clockwise for 107 years around a 24-hour disc. After 1550 clockwise 12 hours designs dislocated all other designs as more people became used to reading them.*

Another compelling example of path dependency was articulated by Cowan (1990) who puts forward a detailed overview of the development of nuclear power reactors in which he argues that light water reactors emerged as the dominant technology despite the fact that it was not the best technology, either economically or technically. Cowan (1990) concludes that, “technology which first makes large advances along its learning curve will emerge dominant”.

### **Criticism of the QWERTY Keyboard and Other Stories**

According to Ruttan (1997), David (1985)'s paper on the economics of QWERTY has achieved the status of 'founding myth' of the path dependency literature. Although the typewriter keyboard story, as an empirical example of market failure, has much appeal, Liebowitz and Margolis (1995) argue that perhaps the best evidence of the empirical shortcomings of path dependency is the continued use of the story of the QWERTY keyboard as the paradigmatic case to support the theoretical model.

Liebowitz and Margolis (1994) pour scorn on the QWERTY keyboard argument. They posit that theoretical papers in the network externality literature (as an aspect of path dependency) frequently cite examples that are often a combination of anecdotes and speculation – they are of a highly conjectural nature (Liebowitz & Margolis, 1994). In their view, there are no compelling examples of markets failing in the sense that the 'wrong' choice of network, among feasible alternatives, was made.

In forceful critiques, Liebowitz and Margolis (1990) argue that the evidence in the standard history of QWERTY versus Dvorak is flawed and incomplete. In a separate paper, Liebowitz and Margolis (1994, p. 147) argue that the claims for the superiority of the Dvorak keyboard are suspect since claims are traceable to Dvorak himself:

*Alas, almost every element of this tale is false. The Qwerty keyboard was not created to slow down typing speed. The empirical support for the story is a US Navy study conducted during World War II. The Navy study was very poorly documented and designed, and appears to have been conducted by Navy Lieutenant Commander August Dvorak, creator and patent holder on the keyboard bearing his name. A later carefully constructed and controlled study, performed for the General Services Administration in the 1950s, demonstrated quite the opposite results from the Navy study.*

According to Liebowitz and Margolis (1994), the Dvorak typewriter keyboard is thus a rather poor empirical base upon which to support a theory. They argue that this perspective is theoretically fragile and empirically undocumented (Liebowitz & Margolis, 1994). In the same vein, Liebowitz and Margolis (1994) dismiss Arthur's (1989) claim that the steam engine could have presented an attractive alternative to the internal combustion engine. They "...find this particular example difficult to take seriously" (Liebowitz & Margolis, 1994, p. 148).

Adler (2002) argues that capitalism, as encapsulated in scientific management and mass production, may be efficient in the performance of routine partitioned tasks but encounters enormous difficulty in the performance of innovation tasks. Where knowledge management is the critical task, the more effective approaches rely on long-term partnership-style relationships based on 'goodwill' trust.

According to Adler (2002), innovations are pushing beyond the limits of market and hierarchy, towards greater collaboration. The legitimacy of capitalism as a form of society based on private ownership of productive resources is progressively being undermined. External shocks like market fluctuations and crises can force the firm out of business, and so the development of greater knowledge-management capability is necessitating the displacement of the market as the dominant form (Adler, 2002).

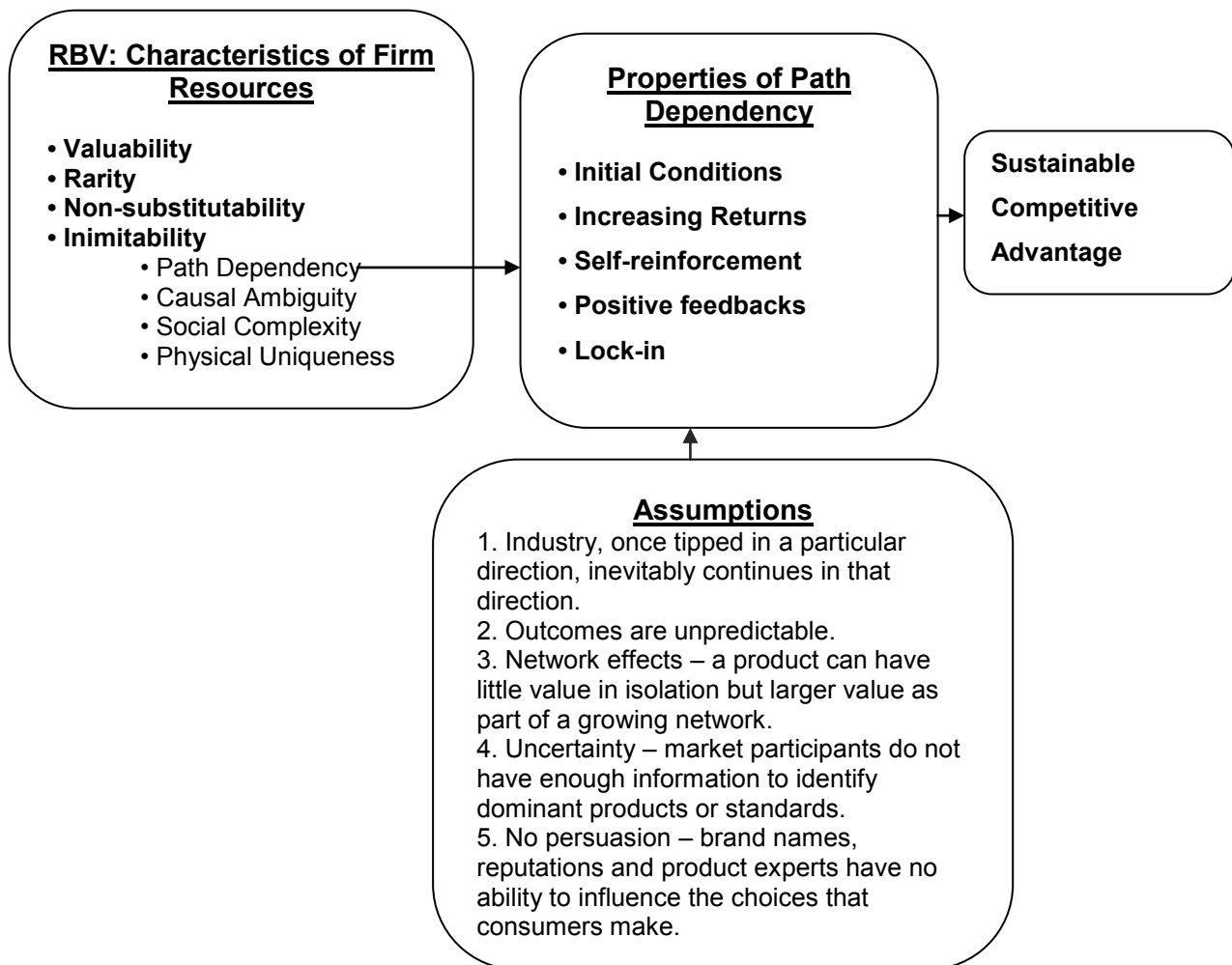


### **Path Creation**

Stack and Gartland (2003) suggest that while path dependency studies are valuable for showing that less-than-optimal technologies can survive and prosper, path dependency is less useful as an explanatory mechanism for the processes underlying these developments. Path dependency focuses on the evolution of production processes as outlined in the examples above, and examine instances in which inferior technologies have emerged triumphant in the marketplace. However, “By attributing these inefficiencies to historical accidents, they minimize the role firms played in creating and shaping their economic environments” (Stack & Gartland, 2003, p. 489). In this regard, Stack and Gartland (2003, p. 489) introduce the concept of path creation – “rather than treat the process of lock-in as a random event or historical accident, there is need to emphasize the role of entrepreneurs and firms in shaping and interacting with their environments”

### **Conceptual Framework**

Cavana, Delahaye, and Sekaran (2001) define a conceptual framework as a logically developed, described and elaborated network of associations among concepts relevant to the problem situation. Perry (1998, p. 790) advises that “the literature review chapter also has some initial theoretical frameworks modelled with boxes and arrows developed from the literature review”. Based upon an extensive review of the strategic literature, the following framework of path dependency was developed. The framework helps to improve conceptual clarity of path dependency and will be used to explore the development of UR.

**Figure 3.6: A Conceptual Framework of Path Dependency**

**Source:** Author

## Conclusion

This chapter traced the development of explanations for differentials in firm performance from the IO economics perspective, RBV perspective and path dependency perspective. It examined the causes and features of path dependency before constructing a framework of path dependency. The next chapter discusses the methodology used in this study.

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **Introduction**

This Chapter discusses the research philosophy, the research strategy employed and the research tools used in pursuit of the research objectives for this study. Cavana, Delahaye and Sekaran (2001, p. 5) define business research as “an organized, systematic, data-based, critical, objective, scientific enquiry or investigation into a specific problem or issue with the purpose of finding solutions”. It involves the discovery of new facts and relationships and the expansion or verification of existing knowledge. The objective of this research was to test the efficiency of the concept of path dependency through the prism of a case study of the University of Rhodesia (UR). Both quantitative and qualitative research methods were used to explore the central research question, i.e., whether the development of UR exhibited identifiable characteristics of path dependency.

### **Research Design**

A research methodology is defined as the strategy by which the researcher maps out an approach to problem-finding or problem-solving (Kothari, 2004). Research methodology is made up of two major elements, which are research design and data collection methods. According to Cooper and Schindler (2001), research design can be considered as a blue-print to guide data collection, processing, measurement and analysis. It identifies the questions to be studied, what data are relevant, what data to collect, and how to analyse the results (Kennedy & Luzar, 1999).

According to Yin (1994), the research design is the action plan for the researcher to move from one position to another. It is the methodology according to which data is collected and analysed by the researcher – a set of logical steps to be followed by the researcher in answering the research questions. It is a series of advance decisions that, taken together, comprise a model of how the investigation to answer research questions will be conducted (Marczyk, DeMatteo & Festinger, 2005). It is a framework for conducting a research study – the road map of what the researcher has to do

during the research process. The purpose of the research design is to help researchers make crucial choices in the allocation of limited resources (Sobh & Perry, 2006). The study of UR was designed to explore whether the institution exhibited identifiable characteristics of path dependency in its evolution.

### **Research Philosophy**

A research philosophy is a belief about the way in which data about a phenomenon should be collected, analysed and used. Researchers base their endeavours on differing values, assumptions and beliefs about how research should be conducted. These beliefs arise from assumptions made about the very essence of the phenomenon under investigation, or the *ontological* question (Petrov, 2010), and the assumption about the nature of knowledge concerning the phenomenon, that is the *epistemological* question (Fawcett & Hearn, 2004).

#### **(i) Positivist Research**

Positivist research (scientific, traditional, or experimental approach) adopts a quantitative approach to investigate phenomena (Weber, 2004) whilst interpretivist research (phenomenological, anti-positivist, post-positivist or constructivist approach) seeks to describe and explore in-depth phenomena from a qualitative perspective (Walsham, 1995). Positivist philosophy assumes that the researcher is independent of, and neither affects, nor is affected by the subject of the research. Saunders, Lewis and Thornhill (1997) argue that positivist research owes much to what we would think of as scientific research, which is meant to answer questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena.

Positivists believe that reality is stable and can be observed and described from an objective viewpoint, i.e., without interfering with the phenomenon being studied (Weber, 2004). The positivist researcher is expected to remain aloof, and separate from the research subjects to ensure total objectivity during data gathering and analysis (Cavana *et al.*, 2001). The goal of

positivists is to explain, predict and develop laws that can be universally applied. Emphasis is on a highly structured methodology to facilitate replication on quantifiable observations that lend themselves to statistical analysis (Sobh & Perry, 2006). Predictions can thus be made on the basis of the previous observed and explained realities, and their interrelationships.

The hallmark of positivist research is replicability. Positivist research uses deductive reasoning – beginning with a theoretical position and moving towards concrete empirical evidence (Cavana *et al.*, 2001). Positivist research is based on the assumption that there is a set of universal laws out there waiting to be discovered (Cavana *et al.*, 2001).

#### *Criticism of Positivist Research*

Cavan *et al.* (2001) criticize positivist research as follows:

- It is superficial in that it attempts to reduce all aspects of human endeavour to numbers.
- It fails to deal with the meaning systems of people, including the way they think and feel.
- The independence of the researcher is a myth, and the use of statistical procedures is an attempt to hide the fact that all researchers have subjective responses and involvement with the research.
- Statistical samples often do not represent specific social groups, and do not allow either illuminating generalisation or understanding of individual cases.

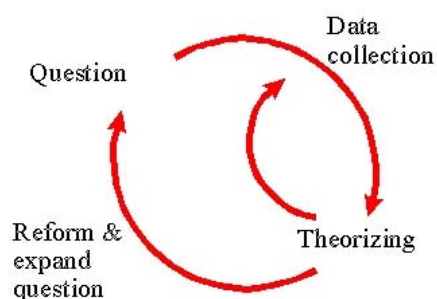
#### **(ii) Interpretivist Research**

Interpretivists (anti-positivists) believe that reality is not a rigid thing but a creation of those individuals involved in the research (Sobh & Perry, 2006; Walsham, 1995; Cavana *et al.*, 2001). Hughes (1994) posits that reality does not exist within a vacuum; its composition is influenced by its context, and many constructions of reality are therefore feasible.

Interpretivists, thus, believe that we construct social reality, and that social phenomena are products of human thought and remain dependent on thought for their meaning and life. They argue that reality can only be understood through subjective interpretation of, and intervention into, the reality (Cavana *et al.*, 2001). They believe that people experience physical and social reality in different ways (Lakoff & Johnson, 1980). Interpretivists believe that the world is largely what people perceive it to be and patterns of conventions are created out of social interactions between people (Cavana *et al.*, 2001). It is therefore necessary to explore the subjective meanings motivating peoples' actions and intentions, in order to be able to understand them. To interpretivists, phenomena is socially constructed, particular and ambiguous than replicable and clearly defined (Van Maanen, 1979). To interpretivists, generalisability is not of crucial importance (Sobh & Perry, 2006).

Interpretivism (qualitative research approach) is about answering questions about the complex nature of phenomena, often with the purpose of describing and understanding the phenomena from the participants' point of view (Leedy & Ormrod, 2005). In this approach, data collection and analysis are not rigidly separated – data collection is followed by analysis, the results of which are then used to decide what data should next be collected. This is illustrated below in the qualitative data cycle.

**Figure 4.1: The Qualitative Data Cycle**



Rather than produce general predictive laws about human behaviour, interpretivist research presents a rich and complex description of how people think, react and feel under certain contextually specific situations (Cavana *et al.*, 2001). Saunders, Lewis and Thornhill (2003) argue that many people

consider the interpretivist line of argument as persuasive in the case of business and management research. In any case, business situations are unique and complex and are a function of a particular set of circumstances. Cavana *et al.* (2001) argue that if concepts cannot be clearly defined, then a research effort is more likely to be based on a qualitative research strategy.

### Criticism of Interpretivist Research

Cavana *et al.* (2001) suggest that interpretivist research is too subjective, focuses on local, micro-level or short-term events, and does not seek to initiate change. This study uses both the positivist and interpretivist approaches to research.

### **Research Approaches**

There are two broad approaches to reasoning, i.e., deductive and inductive approaches.

#### ***Deductive Reasoning***

Saunders *et al.* (2003) posit that deductive reasoning owes much to what researchers would think of as scientific research. It is the dominant research approach in the natural sciences. Deductive reasoning works from the more general to the more specific. According to Saunders *et al.* (2003), the researcher begins with thinking up a theory about a topic of interest, which is then narrowed down into more specific hypotheses that can be tested with specific data. The researcher has a specific, focused statement in mind and his/her objective is to prove or disprove the specific hypothesis.

#### ***Inductive Reasoning***

The inductive approach aims at building theory by studying the occurrence of events. Saunders *et al.* (2003) posit that the approach is common in research relating to business studies. It is subjective in nature, and relies on qualitative data. According to Saunders *et al.* (2003), inductive reasoning moves from specific observations to broader generalisations and theories. The researcher starts with specific observations and begins to detect patterns and regularities. The researcher then formulates some tentative hypotheses that

can be explored before developing general conclusions or theories. Inductive reasoning is more open-ended and exploratory, while deductive reasoning is narrower and is concerned with testing or confirming hypotheses (Eriksson & Kovalainen, 2008). Cooper and Schindler (2001) argue that deduction is firmly based within the positivist paradigm, whilst inductive approaches exhibit an interpretivist orientation to research.

This research study uses both the inductive and deductive approaches to reasoning. The research aims at building theory (inductive) by studying the development of the UR while the quantitative aspect of the research represents deductive reasoning.

## **Research Methods**

### ***Quantitative Research***

Research can be divided into two broad methods – quantitative and qualitative (Punch, 2004). Quantitative research is the systematic scientific investigation of quantitative properties and phenomena, and their relationships. Sekeran (2000) suggests that the objective of quantitative research is to develop, and employ, mathematical models and theories. It involves an objective way of studying things, whereas qualitative research approaches assume that research is subjective (Punch, 2004). Quantitative research relies on statistics to analyse raw data (Cavan *et al.*, 2001). It includes questionnaires, field and laboratory experiments. It is based on deductive reasoning.

### ***Qualitative Research***

Qualitative research methods aim to acquire an in-depth understanding of human behaviour, and the reasons that govern human behaviour (Sutton, 1993). It tends to use inductive reasoning, and relies on the following methods of gathering information: in-depth interviews (McComark, 2004; Stokes & Bergin, 2006), focus groups (Dawson, 2002; Schmidt, 2010; Stokes & Bergin, 2006), observations (Lee & Lings, 2008; Sutton, 1993), and analysis of documents and materials (Lee & Lings, 2008; Zikmund, 2003).



One strength of qualitative data is that they focus on naturally occurring ordinary events in natural settings, so that we have a strong handle on what 'real life' is like (Miles & Huberman, 1994). Another feature of qualitative data is their *richness* (Miles, 1979, p. 590) and *holism* (Miles, 1979), with strong potential for revealing complexity. Such data provide 'thick descriptions' that are vivid, nested in a real context, and have a ring of truth that has a strong impact on the reader (Miles & Huberman, 1994). With their emphasis on peoples' lived experiences, qualitative data are fundamentally well suited for locating the *meanings* people have on the events, processes and structures of their lives (Miles & Huberman, 1994). This research study uses both qualitative and quantitative research methods to understand whether the trajectory followed by the University of Rhodesia in its historical development was path dependent.

### **Classification of Research Enquiries**

According to Kothari (2004) research enquiries can be classified in terms of their purpose, as well as the research strategy used. Research serves various purposes. Studies can be exploratory, descriptive or explanatory (Cavana *et al.*, 2001).

#### ***Exploratory Research***

According to Cavana *et al.* (2001) and Zikmund (2003), an exploratory study is undertaken when little is known about the situation at hand, or when no information is available on how similar problems or research issues have been resolved in the past. It is a type of research conducted because a problem has not been clearly defined. Saunders *et al.* (1997) argue that exploratory research is a means of seeking new insights, ask questions and assess phenomena in a new light. Exploratory studies are undertaken to better comprehend the nature of the problem that has been the subject of a few studies (Cavana *et al.*, 2001). This research study is exploratory in nature.

### ***Descriptive Research***

A descriptive study is undertaken when the characteristics or phenomenon to be tapped are known to exist (Kothari, 2004). Also known as statistical research, it describes data and characteristics about a population or phenomenon being studied. Descriptive research provides answers to questions as to 'who', 'what', 'when', 'where' and 'how' of a topic (Zikmund, 2003). It attempts to obtain a complete and accurate description of a situation, but does not attempt to uncover the question 'why' certain relationships exist (Punch, 2004).

### ***Explanatory Research (Hypothesis Testing)***

Also called causal studies, it is research that establishes relationships between variables (Zikmund, 2003). It is often used in hypothesis testing (Cavan *et al.*, 2001). Normally quantitative data is obtained from a situation, and this data is subjected to statistical tests in order to get a clearer view of the relationship between variables (Adams, Khan, Raeside & White, 2007).

### **Research Strategies**

A research strategy details the most suitable methods of investigation, the nature of research requirements and the types of data to be gathered. According to Saunders *et al.* (2003), a research strategy is a general plan of how the researcher will go about answering the research question(s) set. It ensures that the information obtained is relevant to the research problem, and that it is collected objectively and economically. The following research strategies have been identified: experiments, surveys, case studies, and grounded theory.

### ***Experiment***

Saunders *et al.* (1997) posit that experimental research allows a researcher to establish the causation phenomena between a small number of variables, using quantitative analytical techniques, with a view to making general statements applicable to real life situations. This approach typically belongs to the natural sciences, and was not used in this study.

### **Survey**

Surveys are most commonly used to gather facts, opinions and attitudes, and the major purposes of survey research include description, explanation, and exploration (Hackett, 1981). They enable a researcher to obtain data about practices, situations or views at one point in time through questionnaires and interviews.

After conducting a survey, quantitative techniques are then used to draw inferences from the data regarding existing relationships. Although surveys give the researcher more control over the research process, their major disadvantage is that much time is spent in designing and piloting the questionnaire (Krejčí, 2010). The survey method was used in this study.

### **Case Study**

A case study involves the development of detailed, intensive knowledge about a single case or a small number of cases. It is an empirical inquiry that investigates a contemporary phenomenon within its real-life context using multiple sources of evidence (Yin, 1994). It investigates pre-determined phenomena, but does not involve explicit control or manipulation of variables – the focus is on in-depth understanding of a phenomenon and its context (Darke, Shanks & Broadbent, 1998). It produces findings not arrived at by means of quantification.

#### *Exemplary Case Study Research*

Yin (1994) identifies five criteria necessary for exemplary case study research. First, the case study must be significant. Second, it must be complete with respect to analytical boundaries and collection of evidence. Third, the case must consider alternative perspectives. The exemplary case study must anticipate obvious alternatives, and show empirically the basis upon which such alternatives can be rejected (Kennedy & Luzar, 1999). Fourth, the case study must display sufficient evidence, allowing the audience latitude to agree or disagree with the conclusions based on major evidences (Kennedy & Luzar, 1999). Finally, the case study must be composed in an engaging manner.

### *Principles of Data Collection*

Case studies typically combine data collection techniques such as fieldwork, questionnaires, interviews, observation, archival records, documentation, physical artifacts or any combination of these (Yin, 1981). The first principle of data collection in case study involves the use of multiple sources of evidence. The rationale for using multiple sources of evidence stems from the concept of triangulation (Kennedy & Luzar, 1999). The second principle of data collection, in case study research, involves the creation of a case study database. This database consists of notes, documents, tabular material, narratives, and answers to questions (Kennedy & Luzar, 1999). The third principle of data collection, in case study, involves the researcher maintaining a chain of evidence (Kennedy & Luzar, 1999). This is used to increase the reliability of the information in a case study. Paying attention to these three principles of data collection serves to improve the validity and reliability of the research data and findings (Kennedy & Luzar, 1999).

According to Yin (1981), although case study may often begin with little conceptual framework, the narrative must be organised around specific propositions, questions, or activities, with flexibility provided for modifying the topics as analysis progresses. This approach was found suitable for this research.

### *Uses of Case Study*

Case study research can be used to achieve various research aims – to provide descriptions of phenomena, develop theory, and test theory (Darke *et al.*, 1998). According to Saunders *et al.* (2003), it is a viable strategy where research is being conducted in an area where few, if any, previous studies have been undertaken. The use of case study research to test theory requires the specification of theoretical propositions derived from an existing theory. Whetten (1999, p. 492) advises accordingly: “Most organizational scholars are not going to generate a new theory from scratch. Instead, they generally work on improving what already exists”. Yin (1994) confirms that single cases may be used to confirm or challenge a theory. This research study attempts to test the applicability of the concept of path dependency to

the University of Rhodesia. In this regard, it takes heed of Bennett and Elman's (2006) advice that methodological choices must take into account the characteristics of the phenomenon that we seek to understand.

#### *Disadvantages of the Case Study Method*

- The data collection and data analysis processes are both subject to the influence of the researcher's characteristics and background (Darke *et al.*, 1998). They rely heavily on the researcher's interpretation of events, documents and interview material, hence the danger of subjectivity.
- Data collection for case study research can be time-consuming and tedious, and often results in the accumulation of large amounts of data.
- Low generalisability as a result of the fact that only one or two cases are studied (Verschuren, 2003). Bennet and Elman (2006) agree: unit homogeneity makes it difficult to generalise with confidence to the broader population. Ragin (1989) advocates the use of multiple cases, albeit as a means to improve generalisability of the findings rather than because of its analytical power. However, Nieto and Pérez (2000) argue that the impossibility of generalising the findings is a criticism founded on a prejudice of people exclusively familiarised with the application of statistical techniques. Verschuren (2003) clarifies this ambiguity by arguing that the difficulty with case study is the tendency by scholars, in many social science disciplines, to define it mainly as the study of one single object rather than as a methodological approach or a research strategy. Yin (1981, p. 59) agrees: "What the case study does represent is a research strategy".
- The case study report is a lengthy narrative that follows no predictable structure – it is hard to write and hard to read (Yin, 1981). Yin (1994) also notes that a case study report must be composed in an engaging manner with not only a clear writing style, but also one that constantly entices the reader to continue reading. This pitfall may also be avoided if a study is built on a conceptual framework, as is evident in the present study.

- Data analysis can be difficult, as qualitative data analysis methods are not as well established, and ubiquitous in organisational literature, as quantitative methods (Kennedy & Luzar, 1999).

#### *Advantages of the Case Study Method*

The case study method offers significant advantages, which explain why the researcher used this method to explore the concept of path dependency in the development of the University of Rhodesia.

- Firstly, the case study method ensures that inferences are obtained from the study of an entire situation, rather than selected aspects of a case (Muranda, 1999).
- Secondly, the case study method focuses on the real event, or situation, whilst other methods tend to be abstractions from the real situation (Punch, 2004).
- Thirdly, there is a greater probability of obtaining more accurate information as compared to other research methodologies (Punch, 2004).
- Fourth, case studies offer a holistic, yet rigorous, approach to achieving explanation and understanding (Kennedy & Luzar, 1999).
- Fifth, case studies furnish the dimension of time and history to the study of social life, allowing an examination of stability and change in social patterns (Kennedy & Luzar, 1999).

#### *Why the Researcher Chose the Case Study as a Research Strategy*

Case study research may adopt single-case or multiple-case designs. According to Darke *et al.* (1998), while multiple designs allow cross-case analysis and comparison, and the investigation of a particular phenomenon in diverse settings, single-case design allows researchers to investigate phenomena in-depth to provide rich description and understanding. The researcher selected an information-rich case for in-depth study, the University of Rhodesia. This approach was adopted to allow for an in-depth discussion and intense analysis of factors that explain the University of Rhodesia's success from a path dependency perspective. Logistics, time and resource

constraints did not permit a study of a bigger sample at the required level of depth. Yin (1994), one of the most influential contributors of this research approach, recommends this type of research – a single case is appropriate where it represents a critical case, where it is an extreme or unique case, or where it is a revelatory case. Kennedy and Luzar (1999, p. 586) add their weight to this recommendation:

*The critical case is identified when the characteristics of an actual situation correspond with the assumptions or environment stipulated in the theoretical proposition. The case is then used to confirm, challenge, or extend the initial theory. The extreme or unique case involves situations where circumstances occur so rarely that researchers have found it difficult to establish any common patterns. The revelatory case entails the instance where an investigator has the opportunity to observe and analyze a phenomenon previously inaccessible to scientific investigation.*

The case of UR was chosen because it was found to be a critical case. Case study research is considered to be particularly useful where research and theory are at their early, formative stages. Given the ambiguities and debates surrounding path dependency as a concept, this research assessed the utility and validity of this concept in the context of one particular institution, the University of Rhodesia. Hacket (1981, p. 600) advises that, “The selection of any research method should be directly related to the research objectives, the questions that are being asked, and the kinds of data necessary to answer those questions”. In pushing for methodological inclusivism, Kennedy and Luzar (1999) suggest that we should not limit our research outlets to those that value tools and prediction over explanation and understanding. Perry (1998, p. 799) agrees: “The case study methodology is appropriate for postgraduate researchers whether they plan to have an academic career or a career outside of academia”.

Nieto and Pérez (2000) posit that case study is useful for those who study organisations in general, as well as for a certain focus on management, such as the resource-based view. In the same vein, Bennett and Elman (2006)

suggest that, in studying phenomena like path dependency, case study research can guide analysts to look for theories, or to develop explanations where no such theories are found. In trying to find a solution to the challenge of developing and testing theories about complex phenomena, they posit that process tracing can help unravel these kinds of complexity (Bennett & Elman, 2006). They argue that case studies offer four advantages in the analysis of path dependency, and hence they were used in this study. First, they allow for detailed and holistic analysis of sequences in history; second, they are suited to the study of rare events; third, they can facilitate the search for omitted variables that might explain the clues; and fourth, they allow for the study of interaction effects within one or a few cases (Bennett & Elman, 2006).

### ***Grounded Theory***

The grounded theory methodological approach was developed by Glaser and Strauss (1967). Its development was motivated by an attempt to bridge the gap between theoretically 'uninformed' empirical research and empirically 'uninformed' theory, by grounding theory to data (Goulding, 1998). In grounded theory, data collection starts without the formation of an initial theoretical framework (Daengbuppha, Hemmington & Wilkes, 2006). It is the discovery of theory from data (Glaser & Strauss, 1967). These data lead to the generation of predictions, that are then tested in further observation and which may confirm, or otherwise contest, the predictions (Daengbuppha *et al.*, 2006). It is the constant reference to data to develop, and test, theory that led to grounded theory being referred to as an inductive/deductive approach – theory being grounded in such continual reference to data – being open to what the site has to tell us, and evolving a coherent framework rather than 'imposing' one from the start (Miles, 1979). Theoretical concepts and propositions emerge as the researcher gathers data and investigates phenomena. Eisenhardt (1989) argues that this research approach is especially appropriate in new topic areas. However, according to Miles (1979), the need to develop grounded theory usually exists in tension with the need for clarity and focus.



Glaser and Strauss (1967) provide a strong intellectual rationale for using qualitative research to develop theoretical analysis. According to Goulding (1998), Glaser and Strauss (1967) wrote the book largely as a protest against what was perceived as a rather passive acceptance that all 'great' theories had been discovered, and that the role of research lay in testing these theories through quantitative 'scientific' procedures. The emphasis behind grounded theory, therefore, became one of new theory generation. Grounded theory has transformed methodological debates and inspired generations of qualitative researchers (Charmaz, 2006).

#### *Assumptions of Grounded Theory*

Eaves (2001, pp. 655-56), quoting Glaser and Strauss (1967), summarise the major assumptions of grounded theory as follows:

- ◆ Inquiry is structured by discovery of social and socio-psychological processes.
- ◆ Data collection and analysis phases of research proceed simultaneously.
- ◆ Both the processes and products of research are shaped from the data, rather than from preconceived logically deduced theoretical frameworks.
- ◆ Analytic processes prompt discovery and theory development, rather than verification of pre-existing theories.
- ◆ Theoretical sampling refines, elaborates, and exhausts conceptual categories.
- ◆ Grounded theory methodology is not only aimed at studying processes, but also assumes that making theoretical sense of social life is itself a process.
- ◆ The systematic application of grounded theory analytical techniques leads progressively to more abstract analytic levels.

#### *Conceptual Density*

Grounded theory methodology is designed to guide research in producing theory that is conceptually dense (Soulliere, Britt, & Maines, 2001), i.e., theory with many conceptual relationships. The goal of conceptual density implies that theory should be rich in concept development and relationships, and that it should satisfy four requisite properties:

- (i) *a close fit with the substantive area in which it will be used;*
- (ii) *readily understandable by lay persons;*
- (iii) *is sufficiently general to be applicable to diverse daily situations;*  
*and*
- (iv) *allows at least partial control by researchers over the structure and process of daily situations (Soulliere et al., 2001, p. 254).*

### *Substantive and Formal Theory*

The major distinguishing factor between grounded theory and other qualitative research methods is its emphasis on theory development, either substantive or formal (Kearney, 1998). A substantive theory is grounded in research on one particular substantive area (Glaser & Strauss, 1967). It evolves from the study of a phenomenon situated in one particular, situational context (Eaves, 2001). In contrast, formal theory emerges from a study of a phenomenon examined under several different types of situations (Glaser & Strauss, 1967). The present study develops substantive theory.

### *Theoretical Sampling*

Grounded theory is a methodology that can be used to generate theory where little is already known, or to provide a fresh slant on existing knowledge (Goulding, 1998). The qualitative nature of the paradigm focuses on the search for meaning, and understanding, to build innovative theory and not universal laws (Goulding, 1998). It is a method whose close inspection of the data extends theory through 'theoretical sampling'. According to Glaser and Strauss (1967), theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses data and decides what data to collect next and where to find them in order to develop theory as it emerges. Rather than predetermine the characteristics and size of the sample, the developing theory directs the researcher to new informants and appropriate locations (Goulding, 1998).

'Theoretical sampling' is a procedure for deciding what groups, sub-groups, or situations a researcher might turn to next in the data collection process, in order to test assumptions about emerging analytic concepts and their

properties (Soulliere *et al.*, 2001). It involves a process by which concepts emerge from the data point to the next steps of data collection. According to Glaser and Strauss (1967), the goal of theoretical sampling is to choose groups that will help generate as many properties of the categories as possible, and that will help relate categories to each other and to their properties. Sampling, within grounded theory, is described as 'theoretical' rather than purposeful (Glaser & Strauss, 1967), in that it is driven by the emerging theory (Cutcliffe, 2000). The present study used theoretical sampling to identify respondents. The researcher had no predetermined sample size, but new informants were identified as new properties of the concept under study emerged.

### *Saturation*

In order for concepts and categories to emerge during data analysis, the need for sampling of specific data sources continues until each category is saturated (Cutcliffe, 2000). Therefore, at the beginning of the study, there are no limits set on the number of participants, interviewees or data sources. The researcher continues selecting interviewees until they are saying nothing new about the concepts being explored (Cutcliffe, 2000). Saturation means that no additional data are being found whereby the researcher can develop properties of the category, i.e., the researcher stops getting variation in categories.

Thus, the criterion for judging when to stop sampling the different groups, pertinent to a category, is the category's theoretical saturation (Glaser & Strauss, 1967). In this study, the in-depth, unstructured interviews caused some preliminary issues to surface. After interviewing 33 interviewees, the researcher began to feel that no additional data was being found. At this point of theoretical saturation, the researcher then isolated issues for further investigation (please see Appendix 3 for Round 1 Interview Questions and Appendix 4 for Round 2 Interview Questions).

### *Constant Comparison*

A central feature of grounded theory is its method of constant comparative analysis. Constant comparison is where data collection and analysis occur simultaneously, and each item of data is compared with every other item of data (Cutcliffe, 2000). The purpose of constant comparison is for the development of concepts for the eventual reduction and integration into a coherent theory. In grounded theory, data forms the foundation of the theory, and our analysis of this data generates the concepts we construct. According to Glaser and Strauss (1967), in this method, evidence collected from other comparative groups (nations or organisations) is used to check out whether the initial evidence was correct. The constant comparing of many groups draws the researcher to their many similarities and differences. The method makes probable the achievement of a complex theory that corresponds closely to the data.

The constant comparison method served as the major research procedure in this study. It involved an inter-play between data collection and data analysis that occurred in an iterative manner. Analysis in this study took place as data collection was being carried out. The data collection and analysis processes included conducting interviews and spending the next day transcribing and analysing the data.

### *Symbolic Interactionism*

According to Glaser and Strauss (1967), grounded theory is rooted in the symbolic interactionism tradition of social psychology and sociology. Eaves (2001) defines symbolic interactionism as a theory concerned with the meanings of events to people, and the symbols they use to convey those meanings. It focuses on the inner, or 'experiential', aspects of human behaviour or how people define events and reality, and how they act according to their beliefs (Eaves, 2001). Symbolic interactionism holds that people are in a continual process of interpretation and definition, as they move from one situation to another (Cutcliffe, 2000). The three basic premises of symbolic interactionism are:

- ◆ Human beings act toward things on the basis of the meanings that things have for them. These things may include institutions, ideals, beliefs, activities of others, and situations or any combination of these.
- ◆ The meaning of such things is derived from, or arises out of, the social interaction that one has with other fellows.
- ◆ These meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he/she encounters (Blumer, 1969).

#### *Road Map for Theory Development*

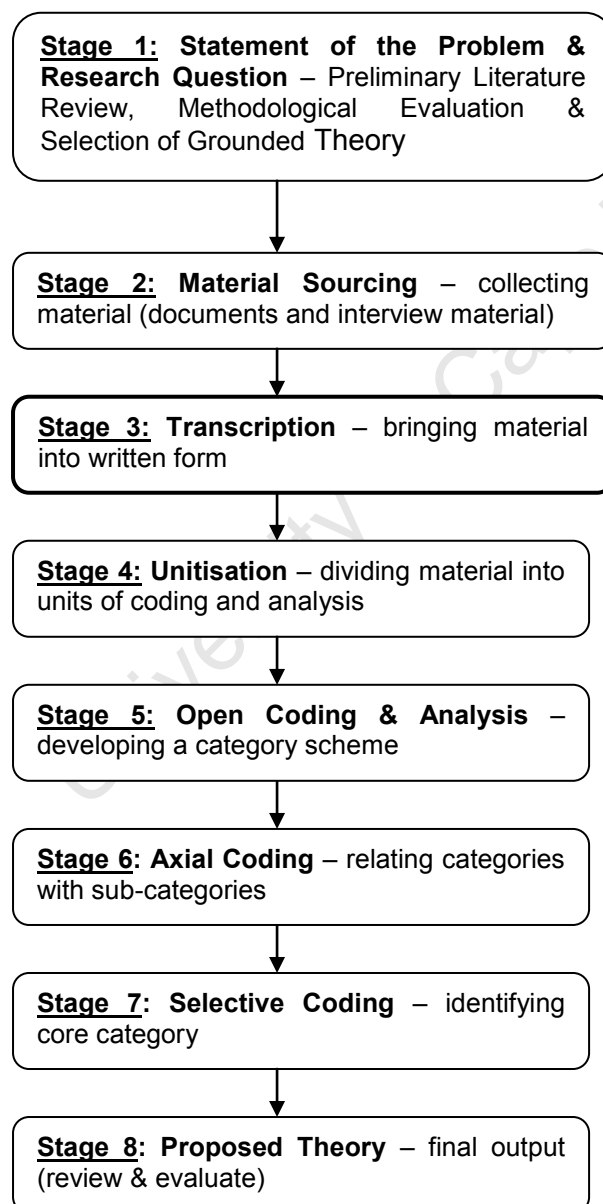
Following Glaser and Strauss's (1967) grounded theory, Eisenhardt (1989) proposes a 'roadmap' for theory development from case study research. According to Eisenhardt (1989), the first step is to define the research question, because without a research focus it is easy to become overwhelmed by the volume of data – data asphyxiation. In theory-building, researchers typically combine multiple data collection methods like interviews, observations and archival sources (Eisenhardt, 1989). An important feature of research, to build theory from case studies, is the frequent overlap of data analysis with data collection, and the freedom to make adjustments during the data collection process (Eisenhardt, 1989). The idea is to allow the researcher to probe emergent themes, and take advantage of opportunities which may be present (Eisenhardt, 1989). Eisenhardt (1989), however, warns researchers that this is not a license to be unsystematic – rather, this flexibility should be regarded as 'controlled opportunism'. The penultimate stage is tying the emergent theory to existing literature, as a way of enhancing the internal validity, generalisability and theoretical level theory of theory building (Eisenhardt, 1989). The final stage is producing a conceptual framework.

Grounded theory requires that the researcher moves through a succession of stages, starting with open coding – where similar data are grouped and conceptually labeled (Scott & Howell, 2008). Then concepts are categorised. Categories are linked and organised by relationship, in a process called axial coding (Scott & Howell, 2008). Conditions and dimensions are developed,

and finally, through an interpretive process called selective coding, a theory emerges (Glaser & Strauss, 1967).

Below, the researcher demonstrates the research process that was undertaken, from a grounded theory perspective, to establish whether or not the development of UR exhibited identifiable characteristics of path dependency.

**Figure 4.2: Research Process – A Grounded Theory Approach**



**Source:** Adapted from: Srnka and Koeszegi (2007, p. 35); Daengbuppha, Hemmington and Wilkes (2006, p. 372).

### *Grounded Theory: Weaknesses and Strengths*

Eisenhardt (1989) notes some weaknesses of building theory from case study. One of them is that because case data lacks quantitative gauges such as regression, they may be unable to assess which are the most important relationships and which are simply idiosyncratic to a particular case. Another weakness is that building theory from cases may result in narrow and idiosyncratic theory, and theorists are unable to raise the level of generality of the theory. Other criticisms include the fact that the method is time-consuming and often takes the researcher in a number of different directions before a plausible theory starts to emerge (Goulding, 1998). However, Eisenhardt (1989) concedes that theory development, from case study research, is likely to have strengths like novelty, testability, and empirical validity arising from the intimate linkage with empirical evidence. Another major strength of grounded theory is that it explains what is actually happening in practical life at a particular time, rather than describing what should be going on (McCallin, 2003).

### *Grounded Theory and Literature Review*

Glaser and Strauss (1967), the two main proponents of grounded theory diverged significantly on their beliefs about how its principles and methods should be interpreted and deployed. The performance of a literature review at the onset in grounded theory studies has been one such controversial area (Chen & Boore, 2009). The dispute was about whether grounded theory should start with a framework or any knowledge of structure. Strauss, in his later writing with Corbin (Strauss & Corbin, 1990) advanced a 'different' version of grounded theory, which they considered to be the result of maturation of the classical approach (Chen & Boore, 2009). They advocated reviewing the literature early in the study for several reasons:

- ◆ It stimulates theoretical sensitivity.
- ◆ It provides a secondary source of data.
- ◆ It stimulates questions.
- ◆ It directs theoretical sampling.
- ◆ It provides supplementary validity.

- ◆ It can identify the current gaps in knowledge (Strauss & Corbin, 1990).

McGhee, Marland, and Atkinson (2007) argue that it is undesirable that a researcher enters the field in an 'atheoretical' state and rather should be aware of extant knowledge. Further, as grounded theory studies often take a new perspective on an old issue, it is important to be familiar with previous knowledge so as to outline the research phenomenon (McGhee *et al.*, 2007), clarify concepts, and define terms (Cutcliffe, 2000).

Cutcliffe (2000) argues that the review of literature helps to identify current gaps in knowledge and provides a rationale for the proposed research. In support of reviewing literature in grounded theory, Walls, Parahoo and Fleming (2010) suggest that the researcher requires some knowledge of the subject to provide orientation and direction. They further argue that such background reading, "...will assist the researcher to recognize the nuances and understand the subtlety of what is being said by participants in the field and in the analysis of the data" (Walls, *et al.*, 2010, p. 11).

McCallin (2003) posits that reading literature has a place in modern-day grounded theory studies because previous knowledge becomes data to be integrated into a study, using constant comparative analysis in order to refine emerging concepts and categories. Consistent with the above approach, this study used the 'modified', or 'modern interpretation', of grounded theory as a research study. This study reviewed literature at the beginning of the research in order to reduce the uncertainty regarding the context and the focus of the topic.

### **Triangulation**

Triangulation is the combination of theories (theory triangulation), methodologies (methodological triangulation), use of multiple investigators (investigator triangulation), and multiple data sources (data triangulation) in the study of the same phenomenon in order to strengthen the credibility and applicability of findings (Jack & Raturi, 2006). Researchers who use theory triangulation, argue that no theory has the prerogative of truth, nor is it



possible to 'prove' the superiority of one theoretical approach over another. Saunders *et al.* (1997) argue that there is no single research methodology that is intrinsically better than any other methodology. They encourage the use of a combination of research methods, as a way of improving the quality of the research. Triangulation can stimulate the creation of inventive methods (Jick, 1979). It can also help to uncover the deviant dimension of a phenomenon – old theories can then be refashioned and new theories developed (Jick, 1979). Essentially it affirms the notion that qualitative and quantitative methods should be viewed as complementary, rather than as rival camps (Jick, 1979).

Saunders *et al.* (1997) observe that it is not uncommon to see researchers combining both quantitative and qualitative methods, or using both primary and secondary data. Triangulation is useful because each method has its own strengths and weaknesses (Jack & Raturi, 2006). The effectiveness of triangulation rests on the premise that the weaknesses in each single method will be compensated for by the counter-balancing strengths of another (Jick, 1979). However, a fundamental concern about the use of a triangulation strategy is that it carries the danger of using theories and methods with different philosophies that can lead to theoretical and methodological opportunism and incoherence.

Miles and Huberman (1994, p. 273) assert that, "findings are more dependable when they can be buttressed from several independent sources", and validity is enhanced when findings are confirmed by more than one instrument measuring the same thing. In this study, interview transcripts, surveys and documents formed the basis of the research data that allowed for continuous review and analysis.

#### *Mixed Methods Approach*

The main goal of triangulation is to confirm a study's results by using qualitative and quantitative methods. This research study used the mixed methods research approach, which focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study (Molina-Azorin,

2009). The mixed method approach was originally an outgrowth of the triangulation of methods. However, it goes beyond the initial goal of triangulation because it seeks to provide a more comprehensive and detailed understanding of the phenomenon under study (Dunning, Williams, Abonyi & Crooks, 2008). It also helps the researcher to discover new perspectives, and to explain anomalies in the data (Dunning *et al.*, 2008). This helps to increase the researcher's confidence in the data and findings.

## **Sampling**

### ***Population***

A population refers to the entire group of people or universe about which the researcher wants to obtain information (Kothari, 2004; Zikmund, 2003). Saunders *et al.* (2003) define a population as the full set of cases from which a sample is taken. It is the group that the researcher is interested in studying and to which the findings of the research will be generalised.

### ***Sample***

A sample is a sub-group or part of a larger population. It is a representative group of elements carefully selected from a population to facilitate investigation of the population (Zikmund, 2003). Sampling enables the researcher to collect data from a sub-set of the population, rather than from all possible cases thereby overcoming time, money and access constraints. Thus the researcher almost always has to work with a sample of subjects, rather than the full population. The main challenges of sampling are representativeness and non-response (Kothari, 2004).

Deciding on a sample size for a qualitative enquiry can be more difficult than for a quantitative one, because there are no 'hard' rules to be followed. The question of sample size rests mainly on weighing the resources available against time to be taken during the data collection process (Kothari, 2004). Saunders *et al.* (1997) acknowledge that it is difficult to strike a compromise between the accuracy of the findings and the amount of time and money available for collecting, checking and analysing the data. The final sample size is a matter of judgement rather than precise calculation. The selection of

sample size depends on the breadth, or depth of, information being sought by the researcher (Zikmund, 2003; Kothari, 2004). To that extent, the validity, meaningfulness and insights generated from qualitative enquiry have more to do with the information richness of the cases selected, and the observation/analytical capabilities of the researcher, than with sample size.

### ***Sampling Techniques***

Sampling techniques are divided into two groups, namely probability (representative or random) and non-probability (judgemental or non-random) sampling (Adams *et al.*, 2007). In probability sampling, the elements in the population have some known chance or probability of being selected as sample subjects (Zikmund, 2003). Probability sampling designs are used when the representativeness of the sample is of importance in the interests of wider generalisability (Cavana *et al.*, 2001).

In non-probability sampling, the elements in the population do not have a known, or predetermined, chance of being selected as sample subjects (Adams *et al.*, 2007). The researcher uses his or her subjective judgement to come up with a sampling method that he or she feels will deliver results and enable him or her to answer the research question(s) (Zikmund, 2003).

A sampling frame is the complete list of the population from which a sample is selected. According to Saunders *et al.* (1997), it is advisable to use as large a sample as possible to reduce error in generalising to the population. A minimum number of 30 elements in a sample are recommended for statistical analyses (Kothari, 2004).

### ***Probability Sampling Methods***

Under probability sampling, the following sampling methods are common: simple random, systematic, stratified, and cluster sampling.

#### ***Simple Random Sampling***

This method involves selection, at random, from a list of the population of the required number of units from the sample (Adams *et al.*, 2007). If properly

conducted, it gives each unit an equal chance of being included in the sample, and also makes all possible combinations of units for a particular sample size equally likely (O'leary, 2004). Simple random sampling has the least bias, and offers the most generalisability (Cavan *et al.*, 2001). However, an entirely updated listing of the population may not always be available.

### Systematic Sampling

It involves choosing a starting point in the sampling frame, at random, and then choosing every  $n^{\text{th}}$  unit (O'leary, 2004). However, this method has certain statistical peculiarities. Whereas the initial chance of selection of any unit is the same, once the first unit has been chosen, there is always the possibility that some important sub-group of a population will not be adequately sampled (Hackett, 1981). Its advantage over the simple random sampling technique is its simplicity.

### Stratified Sampling

Stratified sampling involves dividing the population into a number of groups, or strata, where members of a group share particular characteristics (Adams, *et al.*, 2007). A stratum is a sub-set of the population that shares at least one common characteristic, for example, males and females, managers and non-managers. It involves a process of stratification or segregation, followed by random selection of subjects from each stratum (Cavana *et al.*, 2001).

### Cluster Sampling

It involves dividing the population into a number of units or clusters, each of which contains individuals with a range of characteristics (O'leary, 2004). A random sample (systematic or simple) of these clusters is then drawn. The sub-population within the cluster is then chosen.

### **Non-Probability Sampling Methods**

Under non-probability sampling, the probability of selection for each population unit is unknown before-hand (Zikmund, 2003). It is any sampling plan where it is not possible to specify the probability that any unit will be included in the sample (Kothari, 2004). However, it is more flexible and less

expensive for the researcher than probability sampling, but the results are of limited value (Adams *et al.*, 2007). Non-probability sampling covers convenience, judgemental, quota and snowball (Kothari, 2004).

#### Convenience Sampling

It involves collecting information from members of the population who are conveniently available to provide it (Cavana *et al.*, 2001).

#### Judgemental Sampling

It is a type of purposive sampling. Judgement samples are selected on the basis of what some expert thinks those particular units, or elements, will contribute to answering the particular research question (Zikmund, 2003). Judgement sampling design is used when a limited number, or category, of people have the information that is sought, e.g., experts (Cavana *et al.*, 2001). The principle of selection is the researcher's own judgement as to typicality or interest (Zikmund, 2003). A sample is built up, which enables the researcher to satisfy his/her specific needs in a project. This approach is commonly used when working with small samples, such as in case study research and when there is need to select cases that are particularly informative (Adams *et al.*, 2007). This study used judgemental sampling to select the University of Zimbabwe (formerly University of Rhodesia), because the researcher felt that this case is important.

#### Quota Sampling

The non-probability method, equivalent of stratified sampling. The population is first segmented into mutually exclusive sub-groups, or strata (Kothari, 2004). Then convenience-, or judgement, sampling is then used to select the required number of subjects from each stratum based on a specified proportion.

#### Snowball Sampling

This method is used when the desired sample characteristic is rare (Zikmund, 2003). It is frequently used when the elements in the population have specific characteristics or knowledge, but they are very difficult to locate and

contact (Cavana *et al.*, 2001). The initial sample can be selected by probability, or by non-probability methods, but the new subjects are selected based on recommendations and information provided by the initial subjects (Cavana *et al.*, 2001). The first respondent refers a friend. The friend also refers a friend. Thus snowball sampling relies on referrals from initial subjects to generate additional subjects, accumulating more subjects as the study proceeds (Adams *et al.*, 2007). Whilst the technique can reduce search costs, one of its limitations is that subjects may refer the researcher to additional subjects who hold similar views to themselves, thus limiting the generalisability of the research findings (Cavana *et al.*, 2001). This research technique was used in this study because it was found to be appropriate.

## **Sources of Data**

### ***Secondary Sources of Data***

Secondary data is data that has already been collected for some other purpose. It is data collected for purposes other than the specific research needs at hand (Zikmund, 2003). It can be obtained from internal sources or external sources (books, newspapers, journals, magazines and the Internet) (Lancaster, 2005; Kothari, 2004). Non-written materials can be in the form of video recordings, pictures, drawings, films and television programmes (Dawson, 2002). Digital Versatile Disks (DVDs) and CD-ROMs are other examples of non-written materials (Dawson, 2002). Most of the data for the literature review was collected from secondary sources on the subject of the RBV and path dependency.

Secondary data was used in this research because of the following reasons:

- It is less expensive to obtain in terms of time, effort and money (Zikmund, 2003).
- The data is already available, and can be obtained fairly quickly and unobtrusively (Zikmund, 2003).
- It can be used to triangulate the research findings based on other data such as observation, interviews or questionnaires (Punch, 2004).

However, secondary data is limited by the validity of the information with passage of time, the purpose for which it was collected and the procedure used (Adams *et al.*, 2007). The researcher gathered data from reports, newsletters, administrative records, speeches, journals, newspapers and the Internet. It is important to appreciate the fact that most answers to many problems of an organisation often lie within its files, or in published material (Lee & Lings, 2008), but organisations do not make full enough use, or full use, of the information they routinely collect.

### ***Primary Sources of Data***

Primary data is new data collected specifically for the current purpose. It is obtained by asking questions of the study participant, and it requires the explicit consent and co-operation of individuals being studied (Kothari, 2004). It is based on verbal and written communication between researcher and participant. The main sources of primary data are interviews, questionnaires, focus groups and observations (Kothari, 2004). This research study used interviews and questionnaires to collect data from study participants.

### **Data Collection**

This is the process of preparing and collecting data. Cooper and Schindler (2001) state that data collection usually takes place early on in the study, and is often formalised through a data collection plan. They believe that a formal data collection process is necessary as it ensures that data gathered is both defined and accurate, and that subsequent decisions based on arguments embodied in the findings are valid (Cooper & Schindler, 2001).

The design structure of this research project was based upon using semi-structured interviews, questionnaires and document analysis. These tools were felt to be the most effective means of gathering data, because this research was exploring 'uncharted waters'.

### ***In-depth Interviews***

Also called informant interviews, in-depth interviews can be structured or unstructured. In an unstructured interview, the interviewer does not enter into

the interview setting with a planned sequence of questions for the respondent (Kothari, 2004). The objective of the unstructured interview is to cause some preliminary issues to surface, so that the researcher can decide what variables need further in-depth investigation (Cavana *et al.*, 2001). According to Aaker, Kumar and Day (1998), data for a case study is usually obtained from a series of lengthy unstructured interviews with people involved in the situation. They also posit that semi-structured interviews are especially effective with busy executives and thought leaders (Aaker *et al.*, 1998).

In-depth unstructured interviews have the following advantages:

- They have a high return rate compared to a questionnaire, and allow for follow-ups (Kothari, 2004).
- They allow a more permissive atmosphere so that questions not readily grasped by the interviewees can be rephrased, or repeated, with proper emphasis and explanations where necessary (Young & Schmidt, 1966).
- Respondents tend to appreciate the seriousness of the study when the researcher contacts them personally, as opposed to when they receive a letter and questionnaire from the mail (Kothari, 2004).
- It affords the interviewer the opportunity to assess the characteristics of the respondent, through assessing tone of voice, facial expression and hesitation (Adams *et al.*, 2007).

However, the method is expensive both in data collection and analysis (Adams *et al.*, 2007). Further, lack of standardisation in the interviews leads to concerns about reliability, viz.:

- Interview bias, where the comments, tone or non-verbal behaviour of the interviewer creates a bias in the way the interviewee responds to the questions being asked;
- Interviewee bias, where the interviewee may be sensitive to the in-depth exploration of certain themes and, as a result, may not reveal or discuss an aspect of the topic for fear of further probing and intrusion;



- Interviewees may also suffer from faulty perception, faulty memory, lack of insight and an inability to answer the questions (Young & Schmidt, 1966).

In order to overcome interviewer and interviewee bias, Saunders *et al.* (1997) suggest that the following should be observed:

- Adequate preparation and readiness for the interview by the researcher.
- Appropriateness of researcher's appearance at the interview.
- Managing first impressions.
- Questioning approach.
- Demonstrating listening skills.
- Approach to recording information.

### **Questionnaires**

A questionnaire is a technique of data collection in which a person is asked to respond to the same set of questions in a pre-determined order (Lancaster, 2005). It is a research instrument consisting of a series of questions for the purpose of gathering information from respondents. It provides an efficient way of collecting responses from a large sample of respondents (Kothari, 2004). In order to provide cross-validation (Jack *et al.*, 2006) and triangulation (Jack *et al.*, 2006) of the evidence gathered through the interviews and documents analysis, the researcher used questionnaires to gather information on whether the evolution of UR was path dependent.

Below are some of the advantages of using a questionnaire:

- It can be administered to large numbers of people at the same time and respondents respond to the same set of questions, which improves the precision of results (Kothari, 2004).
- It often has standardised answers that make it simple to compile data (Brace, 2004).

- It also gives respondents more time to consider each question before answering, while maintaining possible anonymity of the respondent (Kothari, 2004).
- Some respondents feel more comfortable about expressing their honest reactions to sensitive questions on a questionnaire, than they do in an interview (Kothari, 2004).
- Questionnaires reduce bias – there is uniform question presentation and no middleperson bias (Kothari, 2004).
- A questionnaire does not require as much effort from the questioner as verbal or telephone surveys (Brace, 2004).
- Questionnaires are less intrusive (Kothari, 2004).
- The method is also cost effective and convenient in collecting data (Kothari, 2004).

However, the major disadvantages of using a questionnaire are:

- It has a low response rate, and responses may be delayed since people generally have an anti-questionnaire belief (Wilson, & Sapsford, 2004; Kothari, 2004).
- It assumes no literacy problems and that the researcher does not have control over who actually completes the questionnaire. Zikmund (2000) argues that questionnaires are limited by the fact that respondents must be able to read the questions and respond to them.
- Incomplete questionnaires may be returned to the researcher (Singh, 2006).
- The researcher is not available to provide clarity in those areas that are not clear to respondents. Saunders *et al.* (1997) point out that responses to a questionnaire can be inaccurate because of intentional and unintentional actions of respondents. Saunders *et al.* (1997) further elaborate on sources of inaccuracy.

*Unintentional Sources of Inaccuracy:*

- Limited memory about people or events under investigation.
- Selective perception of respondents.
- Lack of knowledge of the respondents.

*Intentional Sources of Inaccuracy:*

- Desire to please the researcher.
- Desire to preserve self-image and to be socially correct.
- Need to protect self-interest.
- Desire to scupper or ruin a research.

**Fieldwork*****Semi-structured Interviews***

The fieldwork was based primarily on semi-structured, individual interviews. In addition, two questionnaires were constructed – one to assess whether the UR was a successful organisation or not, and the other to assess whether the emergence of the University was path dependent (see Appendices 7 and 8 respectively). The time horizon used in this research study was a cross-sectional approach, where data was gathered just once over a ten-month period, December 2009 to September 2010. Prior to the data collection stage, less formal interviews, including phone conversations and email communications were conducted with respondents. This was meant to enable the researcher to gain a general insight into the history and structure of UR, as well as to familiarise the respondents with the researcher. These initial interviews were conducted in offices, or the residential homes, of respondents. The data was not collected to develop a theoretical framework, but to increase familiarity with the research setting, to explore alternative data collection methods, and to start to build the research design (Daengbuppha, Hemmington & Wilkes, 2006).

Prior to field interviews, Yin (1994) recommends a pilot interview to refine procedures and discover potential study design defects. Five pilot interviews were conducted to check the interview questions for clarity, content and completeness (Gorelick, 2000). Following the pilot interviews, a detailed analysis of the interview questions, and process, was conducted. Feedback helped to validate the substance of the questions, and minor changes were made to allow for more open-ended conversation (Gorelick, 2000).

These exploratory interviews preceded the development of an interview schedule, consisting of 73 in-depth semi-structured interviews with former students, current and former academics and administrators of UR. The complete list of respondents evolved through the study using the snowballing technique (Yin, 1994), as respondents were asked during interviews about other people who might provide additional information about the study. An underlying assumption for the study, and selection criteria for the interviewees, was that the participants were familiar with the history of UR. In this regard, purposive sampling was used to identify respondents.

The interviews were scheduled in advance and lasted between 45 minutes and one hour. They focused on key events, people, and issues. Since this was a discovery-oriented investigation, interviews were open-ended to allow for free-flowing dialogue (Gorelick, 2000). Respondents provided descriptive data about their thoughts, feelings and beliefs – insights which can be difficult to unravel with structured research (Lancaster, 2005). The researcher used extensive, non-directive probing (Lancaster, 2005) to obtain clarifications during the interviews. He was not formalistic for fear that interviewees could withhold information. The researcher was able to maintain a spontaneous conversational style, necessary for discovery-oriented investigations. In fact, the researcher refrained from using management jargon (Harris & Ghauri, 1998) in order to allow interviewees to talk freely about their experiences.

In order to establish rapport with the interviewees, at the beginning of each interview the researcher gave respondents a Letter of Introduction and a Release Form from the Graduate School of Business, University of Cape Town (see Appendices 1 and 2 respectively). The Letter of Introduction served as an invitation to respondents to participate in the study. It also stated the purpose of the study, and gave assurance of the confidential handling of responses. However, all the 73 participants who were interviewed said that they had no objections to being named in the study.

Each participant was asked for permission to tape record the interview – none objected to the use of the recorder (Gorelick, 2000). Brief hand-written notes

were taken in case of technical failure. With the permission of the participants, the researcher took photographs of 50 interviewees and respondents (see Appendix 11).

Following each interview, the audiotapes were transcribed verbatim by the researcher prior to analysis. The average transcription length was 10 double-spaced pages, and it took on average three hours to transcribe each interview. Each participant received an electronic copy of his, or her, transcript for review and revision (Gorelick, 2000).

The principles of theoretical sampling were adopted, where the data collection and analysis stages were designed to overlap in order to allow both the sampling and data collection processes to be informed by the emerging data analysis (Daengbuppha *et al.*, 2006).

### **Questionnaires**

Questionnaires were hand-delivered to offices or residential homes of 80 respondents (former students, current and former academics and administrators). As with the interviewees, the purposive sampling technique was used to select the respondents, while the complete list of respondents evolved through the study using the snowballing technique (Yin, 1994). Telephone and personal follow-ups were used to improve response rate and minimise delays.

The questionnaires were constructed and the data analysed in such a way that information provided would not be traceable to the individual. The questionnaires were composed of predominantly closed-ended questions to make it easier for the respondents to complete them, and to facilitate data analysis of the responses. In order to minimise the abovementioned sources of inaccuracies, the questionnaires were first pilot tested with five respondents to gauge the depth of the responses, to ascertain whether the questionnaire would yield meaningful responses, and to ensure that respondents did not have problems understanding questions or following instructions correctly (Saunders *et al.*, 1997).

A debriefing exercise was carried out with the selected respondents where they were asked to explain their answers and to state the meaning of each question, as well as describe any problems they encountered in the completion of the questionnaires. The aim was to get improvement suggestions, detect errors, ambiguities and ensure simplicity. As a result of the pilot study, a number of questions were rephrased and the number of questions expanded (see Appendices 5 & 6 for the questionnaires used during the pilot study).

### ***Documentary Evidence***

Printed documents included Annual Reports of the Department of Education of Southern Rhodesia (now Zimbabwe), correspondence, newspaper articles, brochures, journals, and books. Documents were used as a source for triangulation. Data collected during interviews were checked against documentary evidence, and vice versa, thus enhancing the credibility of findings (Jick, 1979).

### **Data Processing, Analysis and Presentation**

Survey data obtained from the questionnaires was first processed, i.e., coded, entered and cleaned before it was analysed using the Statistical Package for Social Scientists (SPSS). The information was presented using tables and graphs to enable easy comparison and clear projection of the situation. Data from semi-structured interviews was analysed using qualitative data analysis software, Nvivo 8.

### ***Qualitative Data Analysis***

Qualitative data analysis is basically a non-mathematical procedure that analyses the meaning of people's words and behaviours (Cavana *et al.*, 2001). There is no natural split between data gathering and analysis – as the researcher gathered data, he was also analysing the data. The data itself also formed the foundation of developing theoretical insights. Miles and Huberman (1994) state that, in qualitative data analysis, the focus is on data in the form of words – in this case, the words that emanated from the interviews with participants. Miles and Huberman (1994, p. 10) define

qualitative data analysis as composed of “three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification”. The three activities are designed to create three different outcomes: reduction activities select raw data, e.g., coding; display activities convert data into information about the case, e.g., demographic tables; conclusion-drawing/verification activities transform information into knowledge that has implications for theory and practice, e.g., noting regularities, patterns, explanations, possible configurations, causal flows, and propositions (Miles & Huberman, 1994). In this study the qualitative research process occurred as “an interactive cyclical process” (Miles & Huberman, 1994, p. 12).

### ***Grounded Theory***

Qualitative data was analysed according to Glaser and Strauss’s (1967) grounded theory approach. The grounded theory approach involves studying data early, separating, sorting and synthesising these data through qualitative coding (Goulding, 1998). Coding means that we attach labels to segments of data that depict what each segment is about. It distills the data, sorts them, and gives us a handle for making comparisons (Charmaz, 2006). The ability to perceive variables and relationships is termed ‘theoretical sensitivity’. The grounded theory approach ensures that categories are drawn from respondents themselves (Goulding, 1998).

Cavana *et al.* (2001) argue that the overlap of data gathering and analysis can be a weakness when the simultaneous analysis contaminates the direction of the data gathering, by diverting the research away from the research objectives. Yin (1994) posits that the subjective, ambiguous and elastic nature of qualitative data makes its analysis very difficult and demanding. Miles (1979) agrees: collecting and analysing data is highly labour-intensive – the range of phenomena to be observed, the recorded volume of notes, the time required for write-up, coding and analysis can become overwhelming. Further, the central difficulty in the use of qualitative data is that methods of analysis are not well formulated, whereas for quantitative data there are clear conventions the researcher can use (Miles, 1979). Grounded theory has not occupied prime position in the methodological conversation because of *inter*

*alia*, perceptions regarding the language of the paradigm – open coding, axial coding, and selective coding, which has connotations of positivist practice (Goulding, 1998).

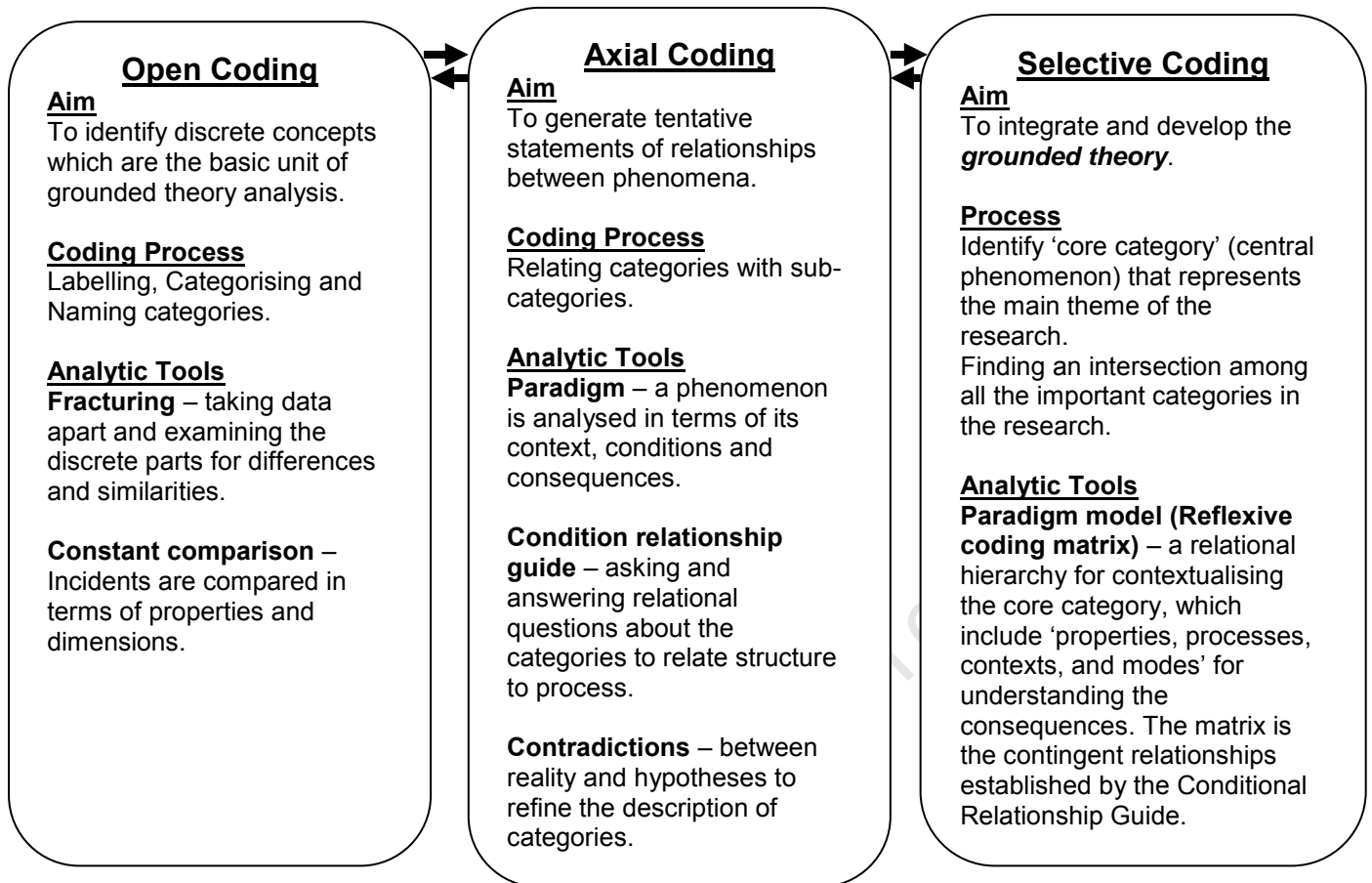
However, Miles (1979) argues that qualitative data are attractive for many reasons: they are rich, full, holistic and real; they preserve chronological flow where that is important; they suffer minimally from retrospective distortions; and their collection requires minimal front-end instrumentation. Qualitative data is apt to be superior to quantitative data in terms of characteristics like density of information, vividness, and clarity of meaning, rather than reproducibility and precision (Jick, 1979).

### *Coding*

Having ordered the data, the researcher continued the interactive process of grounded theory through the systematic data coding process which consisted of open coding, axial coding and selective coding. This enabled the development of theory and completion of the research process through the review and evaluation of the proposed theory (Daengbuppha *et al.*, 2006). The data analysis process was enhanced using a software package for qualitative data storage, management and retrieval, Nvivo 8.

First, names or other personal identifiers were removed from all transcriptions before they were exported into Nvivo 8. Figure 4.3 below illustrates the coding procedure in the data analysis process (which followed grounded theory principles).



**Figure 4.3: Coding Procedure in Data Analysis Process**

**Adapted From:** Daengbuppha, Hemmington and Wilkes (2006, p. 376).

First, the researcher carried out *open coding*, that part of the analysis concerned with identifying, naming, categorising and describing phenomena found in the text. It allowed the researcher to uncover themes and patterns associated with the research questions. Similar data were grouped and conceptually labeled (Scott & Howell, 2008). The researcher developed a list of five categories that were expected to contribute to path dependency based on the Literature Review, as set out in Chapter 3. The five categories were initial conditions, increasing returns, self-reinforcement, positive feedback and lock-in. Miles and Huberman (1994) explain that codes can come from the conceptual framework, list of questions, hypotheses, problem areas and/or key variables that the researcher brings to the study. Glaser and Strauss (1967) call for open coding as the initial phase of grounded theory analysis.

Next, the researcher performed *axial coding* which involved refining the themes/categories that emerged from open coding. This process involved linking categories and developing clear relationships among the categories (Scott & Howell, 2008) via the conditional relationship guide and the reflective coding matrix (Scott & Howell, 2008).

In order to specify the dimensionality of the themes/categories, the researcher compared respondents whose narratives were assigned similar themes/categories, resolving any discrepancies between the themes/categories and noting similarities. Additionally, the researcher explained the relationship of the themes/categories to each other.

The next analytical step was *selective coding*, which involved specifying the core themes/categories that emerged from the analysis. These core themes served as the unifying link between all the themes/categories, and denoted a working theory that depicts the phenomena captured by the questions contained in the interview guide. The process continued until a point was reached when improvements to the model were increasingly small, and the benefits of further analysis were marginal. At this stage, theoretical saturation was achieved and internal validity tested. Comparison with the extant literature then took place.

Results of the qualitative analysis are presented in the next chapter and they also outline the working theory. In the next chapter, the researcher presents these themes more elaborately and illustrates with verbatim quotes.

### **Methodological Experiences, Access to Site, and Ethical Considerations**

The ability to collect data depends on gaining access to its source. According to Saunders *et al.* (1997), gaining physical access may be difficult because organisations and individuals may not be interested or prepared to participate in voluntary activities due to time constraints. Organisations and individuals will find it difficult to co-operate if they do not see the value of the study, or if they have doubts about the credibility, and competence, of the researcher. Respondents can be reluctant to give conclusive answers, for fear of the

implications if ever the information could be attributed to them. Where such fears were exhibited, the researcher directed the attention of respondents to the confidentiality clause in the Letter of Introduction from the Graduate School of Business, University of Cape Town.

Obtaining physical access was not a problem for the researcher, because the researcher has had a long history of associating with the University. The researcher obtained a Bachelors degree and two Masters degrees at the University of Zimbabwe between 1985 and 1990, and also between 1997 to 2000. He was also employed as a Senior Administrator from 1994, before he crossed over to become an academic at the same institution in 2001. Being a staff member of the University, the researcher had established both formal and informal relationships within the organisation. This helped to facilitate access to former students, current and former administrators and academics. The acceptance of the researcher, as a staff member of the University, paved the way for gaining overall trust. With the above experience as a student, administrator and academic, the researcher was in an advantageous position to study developments at the institution. However, this long association with the case institution might have affected the researcher's ability to be objective.

### **Conclusion**

This chapter outlined the methodology used in the study. The next chapter presents the findings of the study.

## **CHAPTER 5: PRESENTING THE EVIDENCE: EMERGING THEMES**

### **Introduction**

This chapter presents the findings of the study. The aim of this study was to examine the emergence of UR between 1945 and 1980, and to establish whether there are enduring characteristics and a pattern that define its evolution. The researcher now discusses outcomes from the interviewees and presents the themes that emerged from the findings.

Five determinants of path dependency (initial conditions, increasing returns, self-reinforcement, positive feedbacks and lock-in) which emerged from the review of literature, were used to categorise data. Evidence from the empirical analysis indicated the profound influence of initial conditions. This influence helped to improve our understanding of path dependency. The findings highlighted the fact that initial conditions defined and shaped the contextual factors that influenced the development of the University. They were a key determinant in the evolution of the organisation by setting the path and trajectory of the institution.

Some of the initial conditions included UDI, the Federation, financial support, Rhodesian nationalism and the British influence. These factors influenced other determinants of organisational development like the recruitment of staff, educational standards and external linkages (increasing returns), curriculum, class size and infrastructure (self-reinforcement), the use of external examiners (positive feedback), and conditions of service and opportunities for research (lock-in). These empirical factors, which were revealed during semi-structured interviews, provided the foundation upon which a new framework of path dependency was built.

During data coding and analysis of both Round 1 and Round 2 interviews, 28 sub-categories were identified. These are presented in Table 5.1 below:

**Table 5.1: Codes Used to Categorise Data**

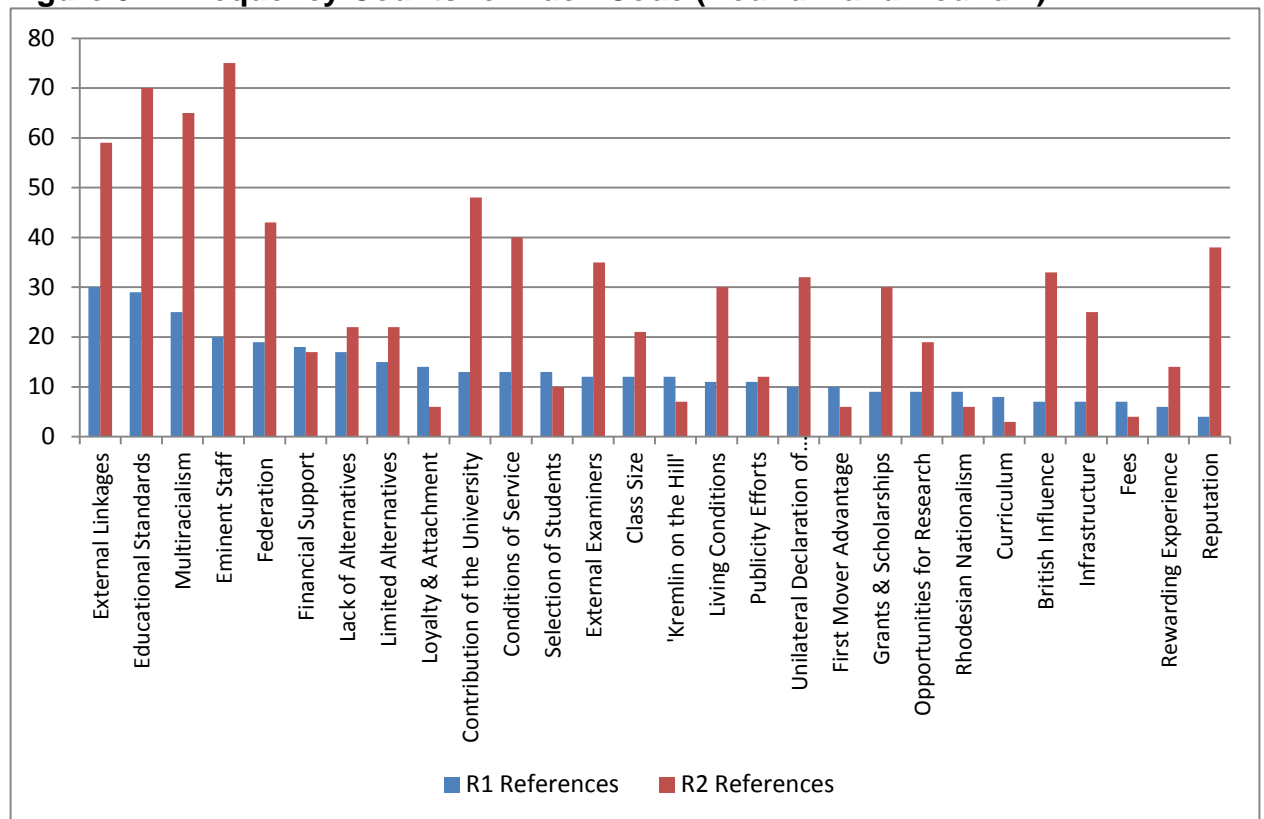
<b>Substantive Categories</b>	<b>Sub-categories</b>
<b><u>Initial Conditions</u></b>	Federation
	UDI
	Rhodesian Nationalism
	British Influence
	Multi-racialism
	Financial Support
<b><u>Increasing Returns</u></b>	First Mover Advantage
	External Linkages
	Eminent Staff
	Lack of Alternatives
	Selection of Students
	Educational Standards
	Fees
<b><u>Self-reinforcement</u></b>	Curriculum
	Infrastructure
	Class Size
	Publicity Efforts
	Grants & Scholarships
	Reputation
	Contribution of the University
<b><u>Positive Feedback</u></b>	'Kremlin on the Hill'
	External Examiners
<b><u>Lock-in: Staff</u></b>	Conditions of Service
	Opportunities for Research
	Rewarding Experience
	Limited Alternatives
	Loyalty & Attachment
<b><u>Lock-in: Students</u></b>	Living Conditions

Below, the researcher presents the number of times that each code appeared in both Round 1 and Round 2 interviews. The frequencies appearing in Table 5.2 below are sorted in descending order by Round 1 interviews.

**Table 5.2: Frequency Counts for Each Code (Round 1 and Round 2)**

<b>Code</b>	<b>R1 References</b>	<b>R2 References</b>
External Linkages	30	59
Educational Standards	29	70
Multi-racialism	25	65
Eminent Staff	20	75
Federation	19	43
Financial Support	18	17
Lack of Alternatives	17	22
Limited Alternatives	15	22
Loyalty & Attachment	14	6
Contribution of the University	13	48
Conditions of Service	13	40
Selection of Students	13	10
External Examiners	12	35
Class Size	12	21
'Kremlin on the Hill'	12	7
Living Conditions	11	30
Publicity Efforts	11	12
Unilateral Declaration of Independence	10	32
First Mover Advantage	10	6
Grants & Scholarships	9	30
Opportunities for Research	9	19
Rhodesian Nationalism	9	6
Curriculum	8	3
British Influence	7	33
Infrastructure	7	25
Fees	7	4
Rewarding Experience	6	14
Reputation	4	38

Figure 5.1: Frequency Counts for Each Code (Round 1 and Round 2)



### **Code Frequencies**

As its name suggests, qualitative enquiry emphasises meanings and quality of data and therefore numbers are not of significant importance. The fact that an issue was mentioned more times than others during research does not necessarily render that particular issue more significant than those mentioned fewer times. It follows therefore, that frequency counts of codes used to categorise data are not necessarily important in the interpretation of qualitative findings. Nevertheless, despite the fact that Round 1 and Round 2 interviews were coded separately, the frequency of prominent themes was almost similar. Thus, the following themes: 'linkage with UK Universities', 'high educational standards', 'attraction and retention of eminent staff', 'multi-racialism' and 'Federation', emerged as some of the prominent themes in both cases. This consistent outcome increases our confidence around the reliability of both the analytic process as well as the findings. Below, the researcher presents these categories/themes in detail, and illustrates with verbatim quotes.

### **Initial Conditions**

The University was conceptualised within a context of several initial conditions, some of which had a significant bearing on the manner in which the institution continued to operate as it expanded. These conditions are discussed in turn below:

#### ***Federation***

All interviewees felt that the establishment of the University was inextricably linked to the formation of the Federation of Southern Rhodesia, Northern Rhodesia and Nyasaland. The British Government wanted the Federation to succeed and so it helped the University to succeed. One participant had this to say,

*I think that the founding of the Federation of Rhodesia and Nyasaland may have influenced the founding of the University. Students, after their secondary school in the three territories, used to go to South Africa. I think*



*very few went overseas. With the formation of the Federation, it was considered that an educational institution was necessary in the country (SCR2).*

Another participant concurred:

*The University College of Rhodesia and Nyasaland was established in order to address higher education needs of the three British colonies making up the Federation of Rhodesia and Nyasaland (ZRR1).*

In fact, the Federation helped to give birth to the University. As one participant elaborated:

*There was a sort of euphoria about the possibilities about this Federation in Central Africa. People put money in it. I think there were a lot of positive vibes going on about the Federation and that spilled over to the University (BRR2).*

Firstly, there was no University in the three countries and inevitably, one had to be established. *“There was no University in the whole area so the motivation was that the Federation needed a University here” (WPR1).*

In addition to addressing the higher education needs of the three countries, the University was also intended to churn out manpower. One participant said, *“The main motivation for the establishment of the University College of Rhodesia and Nyasaland was to serve the Federation of Rhodesia and Nyasaland and to produce manpower for the region” (MCR1).* Others felt that the motivation for establishing the institution was philanthropic.

*The key people were philanthropists but they were also very traditionally British, and so when I joined the University, the Chancellor was the Queen Mother and people who were the first students in this University used to be visited by Her Majesty. She would hold dinners in Swinton Hall. We saw a*

*link forming between philanthropists and the head of the colonial vision, the monarchy itself (LBR1).*

After its establishment, the University continued to fulfil the purposes for which it was initially established, notably addressing higher education needs and producing educated manpower.

### ***Unilateral Declaration of Independence***

The Unilateral Declaration of Independence (UDI) was one of the founding conditions in the evolution of UR. It became a problem during the 1960s and 1970s when the University was seen as a place of dissent – an institution opposed to the Rhodesian Front Government. According to one participant,

*UDI was in 1965. Racism became more open. I was doing my 'A' [Advanced] level. In 1966 I was at the University and during the first month we were already throwing stones. There was rebellion at the University against UDI. That was the centre of resistance. Some White lecturers were not happy with this rebellion, so the racism in the classroom and outside intensified (MMR2).*

One participant explained the unease at the institution during UDI.

*There were a lot of well publicised incidents. Lecturers were arrested and some were deported. That is when the place started to have real problems. The place became more radical. I can remember as a student, I played hockey and we would go to hockey matches in the Salisbury [now Harare] region. People would refer to us as the 'Kremlin on the Hill'. And so there was political turmoil on the campus (BRR1).*

UDI had a negative influence on the development of the University. According to one interviewee,

*On the whole, UDI was basically a negative influence. Lots of people, both students and staff were on both extremes of the political spectrum. We had*

*quite a lot of trouble there. Lots of students and staff left. It probably slowed down the development of the University quite significantly. However, in all fairness, the Rhodesian Front Government, although they were seen as being racist, continued to fund the University. They didn't stop it from being multi-racial. They didn't try to stop recruiting non-Whites (BCR2).*

Another interviewee elucidated how students reacted to UDI and the state response to the demonstrations:

*I arrived here just after deportations had taken place in the 1960s. In Africa Unity Square there were demonstrations. Professor Ranger was part of the demonstrators. One member of the Department of English was deported at that time. There were serious battles on campus. I remember Alsatian dogs and Rhodesian police being involved in door-by-door corridor chases inside the Faculty of Arts building and to their [current government] credit, since Independence we have never seen anything as monstrous as that (LBR1).*

### **Rhodesian Nationalism**

It should be understood that the White Rhodesian government wanted to divorce itself from what was happening in South Africa. This Rhodesian nationalism provided the impetus for the establishment of the University College of Rhodesia and Nyasaland. A former lecturer said,

*I think we have to remember that in 1923 Rhodesia almost became a sixth province of South Africa. But the Whites in Rhodesia said, "No, we have to be a distinct Rhodesian nation". In establishing the University, they wanted an institution which would be a mirror or reflection of British traditions as distinct from the South African tradition, which by 1948 was going for separate development, separate institutions and facilities (ZRR2).*

Another participant echoed the above sentiments.

*You had settler nationalism going back to the referendum of 1923 in which Rhodesia had rejected becoming the sixth province of South Africa. Rhodesians were keen to divorce themselves from the political direction of South Africa. What better way than to invest in an educational institution which would be liberal (ZMR2).*

### **British Influence**

Discussions suggested that the British were significantly influential in pushing for the establishment of the University in line with their policy. One participant said, *“It was the British Government’s policy to set up University Colleges right across the continent” (HAR1).*

Another participant said that the establishment of the University was a way of transitioning out of colonialism:

*They [British] realised that the colonial empire was waning and couldn’t survive and this was a transition, as I saw it, of trying to create what they would call a dominion, a bit like Australia and New Zealand, rather than having a colonial institution that the British no longer had the will, the power or money to sustain. So they wanted to get it off their hands, but politically, it had to be multi-racial because there was no way they could agree to a shade of dominion under minority rule (HAR2).*

One interviewee felt that the establishment of the University was an extension of British philanthropic initiatives: *“The British authorities were trying to continue what the missionaries had started” (KGR1).* The University greatly benefitted by being modelled along the British system.

*The fact that both the administration of the University and its whole academic structure were modelled and determined in the British way had the advantage that the British academic system is a very strong one, and one which the quality of higher education is outstanding (BCR1).*

Another interviewee concurred:

*One of the most important decisions was that the founding fathers had the foresight to know that Independence would come and they made this University subject to a Royal Charter, which meant that even the outrageous interference that was planned had to be tampered with. I was excited to watch the [current] Chairman of Council sitting on the throne that was created for the Queen Mother. That's part of tradition. That's not colonialism. This institution has cherished traditions (LBR1).*

In addition to the quality of education, adopting British standards right from the start had several other far-reaching and sustainable benefits, which will be discussed later. Suffice it to say that the adopted high standards continued to be maintained for the duration of the period under discussion.

### **Multi-racialism**

One of the reasons why the Federation had a strong influence on the University was so that the University would accommodate all races and especially Black students who were intelligent but poor, and who would otherwise not be able to get University education outside the Federation.

*...the decision at its [University] establishment was that it would be multi-racial, and that was radical under the circumstances ... and that it therefore would be open to anybody specifically to Blacks. That really made it to be different at a time when in South Africa, which was a dominant influence, things were moving in the opposite direction (BCR1).*

One participant gave credit to the advocates of the multi-racial experiment for being forward-looking in their thinking at the time.

*I think to its credit the fact that it [the University] dared to make itself multi-racial at a time when things were really hard, when the Government couldn't even brook that kind of thing, let alone all the die-hards and the rules of the*

*country... I think they were advanced in thought. When I look back at what used to happen ...You struggled to come with your White friend in Salisbury [now Harare] and have a cup of tea. That kind of thing we were practising already at the University campus. I really give them credit for being pioneers. It was not perfect but they tried it and it worked (KSR1).*

Another interviewee explained the main motivation for establishing a multi-racial University: *“The main reason for establishing a multi-racial institution was that you could not have a Federal University that was segregated because there was already enough mistrust of the Federation among Black academics in Northern Rhodesia and Nyasaland’ (RR2).*

The multi-racial nature of the University contributed to the institution’s uniqueness: *“The University was an oasis in a totally racist environment” (FJR1).* The institution’s multi-racial nature meant that students of different races could learn together, share ideas and socialise, as revealed by a current lecturer,

*I am sure there were some White students who had never sat at a table or next to somebody in the lecture theatre who is Black and had never had the opportunity to treat them as people... Black students had to realise that they could talk to White people and go through all the social adjustments, not necessarily the academic ones (PFR1).*

Multi-racialism was crucial in the growth and development of the University. For example, it was able to attract academics and students of all races.

*I think for quite a number of people, the fact that it was a distinctly multi-racial University was probably a very attractive pulling card (SJR1).*

This also reinforced the concept of social capital (connections within and between social networks) as academics and students felt like one family. Above all, multi-racialism resulted in collaborative research endeavours which

produced optimum results such as “*revolutionary methods of controlling the tsetse-fly [which causes sleeping sickness]*” (MCR1). The University leadership continued to defy all odds and promoted multi-racialism at the institution. As one former Vice-Chancellor revealed:

*The leaders of this institution kept on saying that eventually we want to become a multi-racial institution in a society which didn't accept that initially. But they did not deviate... other Colleges and Universities in the region were not multi-racial. We kept on saying that was not our route (CGR1).*

However, the promotion of multi-racialism brought about other challenges to the institution. One interviewee revealed that,

*There was also the problem of racially motivated anti-social behaviour by extreme right-wing White students, especially beating up Black students at the Students' Union (SU) on Saturday nights. No Black male student would dare go to the toilet alone at the SU on such nights! (ZRR1).*

Another interviewee concurred:

*I joined the University in 1966 just after UDI. The number of Blacks on campus was very small. In fact, it was not even safe to move around campus at night alone. You could get into serious trouble. We moved in threes and fours, sometimes with weapons, especially during the weekend. There were these White army guys who would come to campus to 'beat up a kaffir' for the fun of it (MMR2).*

As if this was not enough,

*The Land Apportionment Act prohibited Black students from staying in a White area, Mount Pleasant. Parliament had to debate the issue and pass enabling legislation. The halls of residence were segregated by race on campus. A problem arose about what to do with the only Black female*

*student on campus (Sarah Chavunduka), who ended up staying alone in the corridor of a Black male residence before the White warden's family took her into their warden's residence (ZRR1).*

Below, we allow the victim of the above incident to say what she felt about the incident:

*There was Manfred Hodson Hall [hall of residence] for men, White men; Carr Saunders for Black men, but there were not that many Blacks, and then Swinton which was the ladies' hostel. Swinton was not even full because the University had just opened. The debate hadn't been concluded as to where I was going to stay in a land of apartheid and I was the only Black woman. There was the opinion that if the whole of Swinton is not full, "Why does she not go there?" It was a big issue. One journalist wrote that you can't have an African woman in a White women's hostel because you will find these African boys who will be coming and going all over the place. You get these exaggerated stories which just upset you (KSR1).*

Racism raised its ugly head in many places including the classroom. One participant observed that,

*There was a belief that Africans can't do Science, that Black people could not draw three dimensional figures because their mental make-up was sub-standard. I wrote an essay as part of an assignment and I was awarded 25 marks out of 100. I didn't question it because I thought maybe that is what it was worth. When it came to the seminar and I participated in the discussions, the [White] lecturer challenged me whether I had written the essay. When I said, 'Yes'; she said, 'You have to convince me. I don't believe you wrote it because that is worth at least 95%' (MCR1).*

Another interviewee had this to say about some of the effects of the multi-racial experiment,



*In the classroom there were some lecturers who did not like the idea of a Black person asking a question. If you raised your hand, the lecturer would just ignore you. There was racism. Multi-racialism meant that as a Black person you could also go to University but not to integrate the races. It was very unsafe to be seen in the company of a White girl. Besides, there were very few Black lecturers at that time. It was all White (MMR2).*

Another interviewee concurred:

*When it came to writing assignments, the professors would invite White students to their homes, have an evening drink and a meal, and discuss the topics coming the following day. I only discovered this when we wrote our second assignment. I got a 'C' and I was wondering how I managed to perform so poorly when this White girl had a 'B'. She told me the whole story. You had this sinking feeling that it was not fair. The marks had to confirm that Blacks were not good enough (RR2).*

### **Financial Support**

#### *Government Support*

Since the Federation was a significant factor behind the establishment of the University and also since the University was the only institution serving the three countries, it received generous support from various stakeholders. Substantial support came from the Federal government itself. *"The Federal Government itself saw this [University] as an asset and they supported it generously"* (MCR1). Yet another interviewee stated that,

*Factors that made the UR unique included the fact that it was given moral and financial support by the British government than any of the other colonial institutions (ANR1).*

Government funding was by far the University's lifeline: *"Throughout its life the main source of funding for the University has been the state"* (RRR2).

### *Support from the United Kingdom*

Additional support came from the United Kingdom (UK).

*It was well resourced. I am pretty sure that a great deal of resources was made available by the University of London and the Foreign and Commonwealth Office. That would have boosted its standing. There was a lot of external funding that came in for building facilities, etc. (SAR1).*

This was echoed by another interviewee:

*One key decision I would mention is the role of the Inter-University Council in the UK, which was responsible for establishing links with, and really assisted, the University Colleges which were all associated initially with the University of London. It continued to support the new University College of Rhodesia and Nyasaland at the time of UDI and assisted by recruiting staff from the UK and internationally (BCR1).*

### *Private Sector Support*

Support was availed by several other local, regional and international stakeholders such as the municipality, charitable trusts as well as the private sector. A current lecturer revealed that,

*Some firms and businesses started supporting the University. Take Faculties like Medicine and Engineering; they got private financial support. When we started the Commerce Faculty in the late 1970s, we got some support. Law got support from the legal profession (HAR1).*

Yet another interviewee mentioned that,

*Commerce and industry have always been supportive... Many of them provided scholarships and cadetships. Some of them pumped in money, like the Education building was paid for by Delta Corporation. So they put in money (ZMR2).*

The various stakeholders were unwavering in their support such that even in the face of UDI-induced sanctions, the University continued to receive assistance: *“Although there were problems in the Rhodesian regime in confronting sanctions and keeping the economy going, the University seemed to be well-funded throughout”* (FJR1).

### **Increasing Returns**

Due to the factors that we have mentioned earlier on, the University became a successful institution and as a result, it attracted more academics and students. Additional factors which resulted in academics and students alike opting to join the institution include the following:

#### ***First Mover Advantage***

We have already noted that the University was the first and only institution serving the Federation (as well as other countries). Therefore, *“the University became prominent because it took off first. It was the flagship”* (HAR1). There was no appetite for opening another University because the current one was not fully developed. According to one participant,

*It didn’t make economic sense to have another University. We had all the ground available, both for student accommodation and for teaching facilities. The infrastructure was there and to build a second University wouldn’t have made sense because you would also have had to build new infrastructure* (RRR2).

One participant was more explicit in his response:

*The University was originally designed to cater for the White population. The White population was not very big either. The pressure to start other institutions was never there because when they looked at the population, they saw more of the White needs and not those of Blacks. In any case, there were not many high schools for Blacks in the country. We only had a handful, like Tegwani, St. Augustines, and Goromonzi. The colonial state had*

*accounted for their own off-springs. It was a cosy, very inward-looking and self-satisfied state. As Blacks, we were at the University more or less like intruders, an unwanted presence (ZRR2).*

Since the University was the only institution in the country offering such a service, it received tremendous support, *“Because it started first, that is where most of the resources would have been channelled in the early days” (SAR1).*

The University’s success scared potential competitors.

*This University did so well that it was difficult for any new institutions to develop because it was still growing; it had a lot of prestige and it was able to take anyone who was seeking higher education. Also, standards were high so this frightened other people from trying to compete with this very successful young institution (CGR1).*

### **External Linkages**

We have already noted how the University was modelled along the British system. In fact, it took off as an affiliate College of both the University of London and the University of Birmingham [Medical School]. One participant felt that the linkage with British Universities was very important because,

*Firstly, it meant that you had internationally recognised qualifications. Secondly, it attracted very good staff and when this University started, it had very good academic staff. Thirdly, it meant that you had an in-built system of external examiners. All the external examiners came from London or Birmingham and that guaranteed the standards, to make sure that the standards were broadly similar to those at London University. It was a very good system that worked very well (HAR2).*

Another participant said that this linkage helped to assure the market about the high standards at the University of Rhodesia.

*For both students and lecturers there was the fact that the University was attached to a reputable University, the University of London. People don't want to feel that their degrees are inferior or that they will not make it in the world out there. The University of London as a mother University which measured our standards according to its standards, assured lecturers and students that they were dealing with something that could pass all over the world (KSR1).*

Another interviewee concurred:

*Undoubtedly the key benefit and incentive was that it was a London University degree. London is very highly regarded. It was an international qualification. When Medicine started, it was a Birmingham degree, then a highly regarded institution. Therefore you attracted students and lecturers (HAR1).*

The linkage with UK Universities also contributed to the University's development.

*The special relationship with London and with Birmingham were crucial to the development of the University because that meant that the University had ready access to experience, ways of doing things, structures, the way to design degree programmes and those were almost 'lifted' into the University in Salisbury [now Harare] (RRR2).*

Even when the institution became the University of Rhodesia, there was perpetuation of the above-mentioned linkages.

*We made great efforts as individual heads of departments to maintain the external examinations system basically from Britain, and therefore we were able to reassure the public that standards weren't falling because we had become the University of Rhodesia and not a part of London. And the external examiners we had in History, for example, were both from London until 1979 (RRR1).*

The University therefore remained prominent because of its association with reputable UK institutions. Related to the issue of standards is the University's ability to attract renowned academics.

### ***Eminent Staff***

Right from its inception, the University attracted prominent regional and international academic and non-academic staff. One participant's comment is illustrative:

*There were some wonderful scholars and educational leaders. Professor Gelfand (Medicine), Professor Blackstone (English), Professor Christie (Law), Professor Murphree (Sociology), Professor Roberts (History) and Professor Craig (Theology and Principal/Vice-Chancellor) were all remarkable contributors of international standing (WCR1).*

Thus the presence of a large number of eminent academics was a big factor on the side of the University.

*The ability to recruit staff from outside was maintained for a considerable period. That's how Ray Roberts came here. At the time when I arrived here, I would say it was like half of the new staff were either people from here [Rhodesia] or from South Africa, and they were linked in some ways. The other half were still British (BCR1).*

The eminent staff boosted the institution's reputation and this was a major attraction for students and lecturers.

### ***Lack of Alternatives***

Lack of alternatives refers to aspiring Black students who had no choice but to accept loans from government if they wanted to go to University. After completing their degrees, they were deployed to teach in Black secondary schools. They were unable to get other scholarships and had no financial resources to enable them to go abroad for their studies.

Most Black students managed to attend University because they were placed on the Government's loan and grant scheme. A former lecturer said:

*This scheme did not cover professional fields of study such as Law. The majority of Black students were therefore forced by this limitation to study Arts and Sciences which had teaching subjects, so they could end up becoming teachers in Black secondary schools (ZRR1).*

Most Black students had no alternatives.

*They [Black students] could go nowhere but come to this University because their chances of getting a scholarship for going abroad were nearly nil. The White students who were enrolled at the University College were those whose parents couldn't afford to send them out. Very few of them were here by choice. They were here because this was like plan B (BCR1).*

### **Selection of Students**

There was no appetite for establishing another University because the current one catered for the needs of the White minority in Rhodesia. They [Whites] did not see the need for building another University. Further, there was a strict screening process when it came to entry into University. The process was meant to discriminate African students from entering University because there was initially only one African Secondary school that offered 'A' level, and that was Goromonzi. One participant elaborated:

*During our time, in the African Division of Education, only 12.5% of the students writing Grade Seven [examinations] were allowed to proceed to secondary education. When you got to secondary education, there was also the Junior Certificate examination which you had to pass in order to do Matric. That also reduced the number of students who went to high school. When you got to 'O' level, you had also to qualify to get into 'A' level. The system was controlled. When you compared with 'White' education, these restrictions were not there. After all, those [Whites] who did not want [to go to University]*

*had alternatives. They could go to either Harare or Bulawayo Polytechnic Colleges, and these were not open to Blacks (CER1).*

These restrictions narrowed alternatives available to Blacks, who wanted to pursue University education, only to the University of Rhodesia.

### **Educational Standards**

The University also attracted local, regional and international students due to its high standards which were in part due to its meticulous enrolment process and student selection. One interviewee revealed that,

*For its entrance requirements, the University used the model of the UK. The model was not the same as that of South Africa ... and because it insisted on 'A' [Advanced] levels, this made the University special. It gave the University and themselves [students] a status (DDR1).*

One participant revealed how the University built its reputation by allowing students to engage in independent thinking.

*I remember we had a terrible Physics lecturer, and as students, in our arrogance, we went to the Prof. [Principal of the University] to talk about this terrible lecturer. The Prof. just looked at us and asked, "Do you have a syllabus?" We said, "Yes". He asked again, "Is there a library on the campus?". The answer was "Yes". He said, "So what are you complaining about?". That was the attitude. We were there to learn not to be taught, and for the academic staff, research was very important (DRR1).*

Standards were so crucial that even when alternatives were eventually available within the Federation, students from other countries still chose to enrol at the Southern African institution.



*Even when Zambia and Malawi started their own Universities, they were second rate relative to this one, so a lot of Zambians and Malawians would rather have come here [UR] (HAR1).*

The high standards that were set in the beginning continued to be maintained. Some interviewees felt that the standards have not gone down significantly: *“Up to date [2010], I don’t believe that the actual quality of education has suffered much” (KSR1).*

### **Fees**

Low tuition fees also attracted students to the University. It was indeed ‘value for money’ since they received quality education at an almost insignificant cost.

*There is no doubt that all throughout its life, the University has been a very affordable place. The fees in the old days were almost negligible. That was a powerful factor in attracting students to the University. It became a balance between low fees and quality, and in the early days those two things came together (BRR2).*

One participant echoed the above sentiment:

*I know students enjoyed good benefits. The fees were not prohibitive. They were affordable to students. A lot was provided by the University itself. Good meals, balanced. Good accommodation in the hostels. At that time each individual student could occupy their own room. It looked like a hotel situation (KSR1).*

The University cemented its prominence because it was an affordable institution. Thus more and more students joined the institution as part of the characteristic of increasing returns.

### **Self-reinforcement**

There were several factors that contributed towards the University's self-reinforcement, including:

#### **Curriculum**

That the University curriculum was modelled along the British one was itself a positive aspect as this meant that reference works were already available. *"We used some of the University of London syllabi and books. This was a big advantage"* (CG R1). However, University staff further enhanced the curriculum in addition to tailoring it to suit local needs and priorities for example, by setting up the Department of African Languages and Literature which focused on indigenous languages. In addition, practical components were included in the curriculum.

*Events that consolidated the University as a successful institution were the extension of the Faculties in the Sciences, the Medical School and the Veterinary School. It [the University] was viewed as a very good place to come to because you had a lot of hands-on training, particularly in the Medical School. Students got experience that they would never have got anywhere else and they had truly excellent teachers (WVR1).*

This contributed to the University's self-reinforcement as a prominent institution.

#### **Infrastructure**

The overwhelming support that the University received resulted in well-developed infrastructure which not only attracted students but also contributed to the self-reinforcement of the institution as a successful organisation. According to one interviewee, *"Factors that contributed to the success of UR were... a good library and study facilities, very pleasant halls of residence ..."* (AFR1). These facilities were also mentioned by other interviewees.

*It [the University] had residential facilities that were very good in those days. There was a library that by any standard was good in those days. There were very good facilities. There were excellent sporting facilities. There were lots of social activities. The Student Union building was built in about 1964 (BRR1).*

One interviewee added a rather interesting dimension to the issue of infrastructure: *“It was just an amazing place to be. When I joined the University as a first year student, we had more toilets on campus than we had staff and students put together” (DRR1).*

The University did not have to battle for capital equipment as illustrated by one current lecturer:

*I remember that an application came from Professor Annan for a piece of instrumental Phonics equipment that was going to denude the entire budget. It was called a k-sonigraph. I don't think it has ever been used either by Annan or anyone else. But the stalwarts of the Research Board said if the Professor of Linguistics wants a k-sonigraph, it's our duty to provide it. Sadly, it's a luxury we no longer have (LBR1).*

### **Class Size**

Small classes helped to reinforce the image of the University as an institution with high standards.

*We were small in number. We knew every student personally. And even in the early '80s when we began to expand, our classes were still not so big that we didn't know virtually everybody by name. So that creates a very friendly atmosphere, an atmosphere conducive to teaching (DDR1).*

Another participant concurred:

*Academics weren't overwhelmed by huge numbers. It was only in the 1980s that we started to build 400-seater lecture theatres. So they [academics] had relatively few numbers and that meant that they could be involved in the tutorial system. So you had lots of things with four or five students in a lecture, and that kind of got lost as the volumes just overwhelmed the system (BRR1).*

### **Publicity Efforts**

As exemplified by one interviewee, publicity efforts contributed to self-reinforcement.

*All throughout the '70s, apart from the annual production of the Prospectus, we did extensive visits to all the schools. It was a major exercise. Academics and administrators would go out all over the place. I also remember a trip I made on my own because nobody else could come. We would go to Gokomere School with photographic slides to show to the students. We talked and answered their questions. So there was quite an extensive outreach programme. That was to try to persuade them [students] to come [to the University] (BRR1).*

Another participant concurred:

*We were under great pressure to reach out to the wider community and make it clear what we had to offer and respond to their criticisms, needs and suggestions. We had a very important public lecture series, many of which were repeated in places like Bulawayo. The Summer School was developed in the 1970s and that was a resounding success (RRR2).*

According to another interviewee, open days were a significant part of the publicity agenda.

*We used to have an open day when I was a student here, which was a yearly event. The community was very much involved with stakeholders from*

*business and commerce. This was very important because we knew what the community was getting from us and what they wanted from us (WVR1).*

Another interviewee concurred:

*We developed a Summer School so the public could come in and listen to lectures on something topical, not really academic, but nevertheless serious, with some intellectual content. They were very popular. We organised an Open Day once a year where various exhibits were made in scientific Departments, which showed experiments and they were incredibly popular. The attendance was in the thousands (RRR1).*

The Summer Schools and Open Days helped the University to build its image and to facilitate some interaction between the institution and society at large.

*People would come here for a week and have lectures on whatever, whether it was gardening. I gave a series of lectures on Einstein. Open Days and Summer Schools were tremendous for the public to come and see what a University does, because it was a new University when the population, both Black and White, didn't really know what the University was unless they had been to University themselves (PFR1).*

The Rag Day provided another avenue for the University's publicity efforts and this helped to reinforce society's image of the University as a good institution.

*There was also Rag Day, something which has fallen away. Most of the Universities have a charity where they want to raise money for good causes. We used to have processions in town, social functions of that kind and I am sure that brings the University into the public eye, provided the students are well behaved (PFR1).*

The media also played an important part in the institution's publicity efforts.

*We made sure that the newspapers knew if there was any particular honours earned by members of staff, say elected to this or prize for that... People were encouraged to participate in radio and television broadcast. I did that for a while. People were involved in panel discussions, or giving their opinions on current developments, or brought in as an expert to talk about an outbreak of disease. This was part of the public relations agenda (PFR1).*

### **Grants and Scholarships**

Grants and scholarships that were offered to students assisted them to attend University. This helped to reinforce the image of the University as a dominant institution of higher education. One interviewee illustrated the role of grants and scholarships:

*The grants system that was operated for students to come here [to University] was quite efficient. The problem with it in many ways was that the bonding of students meant that a lot of people came here to be school teachers. They [students] didn't want to be school teachers but that is the only way they could come because they were paid some grants for that... I don't see any other way of doing it in a country like this one where you have a huge number of poor people who cannot afford [to pay fees] (HAR2).*

The question of financial support for White students was not a problem but for Blacks it imposed some limitations. For Black students it tended to eat into the numbers of those who could go to University, whereas for Whites, even if they had poor 'A' level results, they still had opportunities for sponsorship. In his reminiscences, one interviewee said,

*I remember in 1973 we were in a queue to register at the University. I had managed to get two 'A's and a 'B'. An 'A' in English, an 'A' in History and a 'B' in Geography. In front of me was a White female student who had a 'D' and two 'E's. She was very proud to show me that she had two scholarships. One was worth £600 and another worth £1 000. Meanwhile, I was only entitled to a £600 scholarship. For Black students, unless you got a scholarship, it was a*

*big problem [to go to University] in the sense that you had to get some funding somewhere. That is what limited the intake of Blacks into the University (ZRR2).*

### **Reputation**

The University also gained a good reputation.

*I think the biggest factor [that contributed to the reputation of the University] was probably the quality of the graduates. When they went out they proved themselves on the world stage that they were up to it. I think that is still the case today. Educated Zimbabweans are priced all over the world and are recognised for being able and hard working (RRR2).*

One participant explained why the reputation of the University helped to reinforce its position as a prominent institution:

*The reputation of the University improved as more students attended. I think we got the brightest students from all over the country. We got the cleverest students from the Black schools because they were hand-picked and the competition to get places at UR was cut-throat. The White students didn't face the same competition but even then they tended to come from backgrounds where people wanted to learn (ANR1).*

All of these factors resulted in self-reinforcement to the extent that several other institutions looked up to the University to provide academic leadership.

*The University had another kind of effect on existing institutions – your tertiary or post-school training institutions – education, agriculture, technical, and theology were issuing diplomas – the whole range now had the opportunity and incentive to establish a link with, and come under the wings of this institution, and that is the most significant [development], not new, but the advancing of existing institutions which could now benefit in many ways and develop or upgrade their training (BCR1).*

Another interviewee noted that,

*The Institute of Mining Research, for example, was funded from outside partly by big companies like Anglo-American, but the only obvious place to put it [money] was the University, and that is why there was a Department of Geology. The School of Social Work was another one. When Accountancy was created as a degree course, it was funded by the Accountants. The only place to put it [money] was then the University. It was a fairly natural progression (RRR1).*

The University also established its reputation partly through the efforts of individuals.

*There was a chap like Dr Mitchell who did a lot of work in Kariba, on the Kariba weed, and became a world expert on this problem. Unfortunately he went off to Australia. There were others in medicine who were doing the same thing. The historians, starting with Ranger and others – these guys put us on the map. The reputation of the University was established mainly by individuals rather than by the corporate institution. In the field of sport at one stage the University was high in hockey. It had a lot to do with Rob Blair who was a hockey fanatic and he drove it. It was these sorts of things that established the reputation of the institution (RRR2).*

### **Contribution of the University**

The University's contribution to the development of the Rhodesian society and economy helped to reinforce its image as a prominent institution. In this regard, one participant said,

*The most important contribution of the University to the country and society is that it created a beacon of hope and aspirations for the Black community as an opportunity to become somebody, to improve your status. It raised our consciousness and awareness about possibilities as well as what was happening around us, improving our self-esteem as a people, that you could*



*actually become a different kind of person. It elevated a lot of Black people and opened possibilities to things that we thought we would never be able to do (CUR2).*

Another interviewee articulated the main contribution of the University to the development of the country:

*The University has contributed [to the development of the country] by providing the pool of politicians, economists, teachers, writers and medical doctors. In a sense, the biggest thing we can say about this University is that it has given opportunities to many to experience the atmosphere of being at University and to become who they want to be in life (ZMR2).*

Some have seen the contribution of the University to the development of the country in terms of multi-racialism and the development of the education system.

*I think the University has made a major contribution to the development of the education system at large. It has in many ways been at the forefront in terms of multi-racialism, whether it worked or not, at least it was there. It was pretty much the only first genuinely multi-racial institution in the country (HAR2).*

### **Positive Feedback**

#### ***'Kremlin on the Hill'***

So outstanding and noticeable was the University's might that it was seen as *'the Kremlin on the Hill'* (DDR1). One interviewee said that, *"I can remember many times playing hockey for the University team and we would go to various sports clubs around Salisbury [now Harare]. People would call us "the Kremlin on the Hill" (BRR2).* In an earlier statement, the participant said, *"We were seen as the 'Kremlin on the Hill'. So government looked at us with a degree of uh... what are you doing? What are you talking about? What are you whispering about?" (BRR1).*

It was also dubbed by several other names: “*The University of Rhodesia was known as the Cambridge of Africa*” (LRR1). Positive feedback even came from other institutions that University graduates had gone to.

*I remember some people who got 2.2 who went off to some other Universities and did spectacularly well because they had such good grounding (SJR1).*

Some participants still feel strongly positive about the institution.

*Zimbabwean students are in my view the best students in the world. I have taught in other countries. I have taught in Britain. I have taught in Spain. I have taught in Italy and more recently in France. If I took members of my current English Honours class to Trinity College, Cambridge, and released them amongst the students there, they would out-perform their British counterparts (LBR1).* This positive feedback further entrenched the University’s position as a centre of excellence.

### **External Examiners**

External examiners were by far the key players who not only kept an eye on the University’s standards, but also provided valuable feedback. One participant explained how this feedback was provided:

*Every paper was marked. It wasn’t like external examiners today who just come and dip in. The papers went to London and the London examiner double marked every single paper. If there were any deficiencies, these were brought home to us and we had to repair them either by changing the syllabus or changing the staff and doing what was required (RRR2).*

Another participant was more elaborate:

*For a start, because money was not an issue, external examiners came for quite a long time. So they would be here for almost two weeks. They would be given specific batches of scripts with a specific brief in mind. I remember*

*we would give our external examiner four scripts to read because we couldn't decide whether they [candidates] were to get distinctions or not. That external examiner would produce a handwritten report and read it aloud in our Board with detail and then we would interview all four of the candidates. We had such distinguished external examiners. We were very blessed. We were very lucky (LBR2).*

External examiners were involved in overseeing the standards of teaching and examining at the University.

*People flew to England because the Examiner Board meetings were held in London. I attended one myself at one stage. Here were results from Salisbury being discussed in London, and we had a few explanations of why these marks were low or why these marks were high. So we depended on the expertise of others (PFR1).*

In this way, external examiners helped to maintain and improve standards at the University.

*It [the University] got a very valuable estimate of its performance from external examiners' reports which came all the time. They used to go straight to the Vice-Chancellor and they provided a regular working description of how efficient the institution was (ANR1).*

One participant said that most of the feedback from external examiners was informal:

*... it wasn't the reports they wrote that you learnt a lot from. It was for them being here for 10 days or so and mingling with them socially and talking about things. And they would say, 'Well, have you thought of doing this or doing that, changing your syllabus, or have you seen a new book or that research or whatever'. The ostensible benefit was to guarantee standards but the real benefit was the informal contacts (HAR2).*

The positive feedback did not only improve existing standards. It also gave some impetus to move forward.

*The visits by external examiners were very important and it gave it [the University] the confidence to move ahead to developing new faculties such as Engineering (BR R1).*

Through positive feedback, the University grew from strength to strength.

## **Lock-in**

### **Staff Lock-in**

Due to the aforementioned factors, both staff and students were attached to the University. Below is a discussion of the factors that explain staff attachment to the University and the resultant lock-in:

### **Conditions of Service**

Staff members were generously remunerated:

*For the staff, the lecturers, given the context at the time, were relatively well paid. Even when I went to join the UR in Admin in 1971, the salary that UR could give me was good compared to the civil service, or even the private sector (BRR1).*

Salaries for academic staff were comparable to those offered at British Universities:

*Even an Assistant Lecturer in 1969 earned £90. A return ticket to Cape Town (from Rhodesia) by air at that time was £30. So the remuneration was good (LBR2). An academic staff member recounted with nostalgia:*

*The apex of it must have been about 1975 where the local dollar was not only convertible but was worth more than the pound (British pound). I remember that when I was a student at Reading University, which I did when I was on sabbatical shortly after my appointment, I appeared to be earning more than*

*lecturers at the University were earning. It looks small by today's standards. I think I was getting about £220 but they were earning even less and had no sabbatical benefits, no contact benefits (LBR1).*

In addition to handsome salaries, staff members enjoyed several benefits.

*There was housing. There were housing allowances. If you wanted to build a house you got mortgage assistance. There were sabbaticals and contact visits which were quite generously funded, and families were generously funded to go on contact and sabbatical visits. Dependents of members of staff received free education (SJR1).*

Conditions of service were also attractive: *“Salaries were comparatively high for lecturers. There was contact and sabbatical leave to the UK. The University enjoyed a high social status in the community” (ZRR1).*

Another participant concurred:

*One of the work conditions that attracted lecturers was the extraordinarily generous leave conditions, that every third year for ordinary academics you had to go to London. Every six years you had a sabbatical in which you spent a year with your salary and airfares being paid (CAR2).*

### **Opportunities for Research**

Availability of research opportunities was also an important reason for most lecturers to stay put:

*Academics stayed because of research funds that were available most of the time. Whatever research you wanted to do during those years, you got the money because there was a lot of it (CGR1).*

Academics were also excited about the possibility and opportunity to conduct research in a new environment.

*Lecturers had the opportunity to pursue research interests in virgin territory. The reason why the Physics Department developed expertise in Geophysics was applying physical ideas and concepts towards distinctly local circumstances. That would have been true in Biology and Chemistry, and with animals and plants in Agriculture. But the fact that there were lots of opportunities for research which was brand new, it seemed sensible to pursue things here that you couldn't do anywhere else. I imagine all the different departments would have heard that it was a wide open virgin research which had really not been tackled before (PFR1).*

This interested some academics enough that they had to stay put, further promoting lock-in.

### **Rewarding Experience**

To some, just being at the University was rewarding enough.

*Many staff stayed an awfully long time because they found it a rewarding place to be. I think people were happy to stay [at the University] because they were treated as academics, with academic rights and freedoms, and the administration believed that the academic staff knew what they were doing (WVR1).*

Another participant concurred:

*I myself form an example of stickiness because I persuaded my wife that we should come here. We said alright for three to four years, just to experience academic and general [life]. We never intended to stay here. There are many like me who came here just because they thought it was an interesting job to do for three years, and would naturally move on and never did. They stayed here. You put down roots, you make friends, buy a house and have children and they go to school (RRR1).*

One former lecturer said, *“Lecturers knew that the quality of students they could produce was very good. That makes the job worthwhile. It is very gratifying. Everybody who has been to the University talks fondly of it”* (DDR1).

Further evidence of lock-in came from one former administrator:

*Academics like freedom. It’s not only about the money. But where there is academic freedom, people fell free. They can do their publications. There is opportunity for private remunerative work. There is a certain aura about being at the University. Happiness is not only about cash. It is about a sense of fulfilment. There are certain things that you can’t quantify in terms of remuneration* (TLR1).

Others felt that most lecturers stayed at the University in order to advance their careers: *“For most it was a way of accumulating experience and that is the way that you get promoted in academia, moving from one institution to another”* (HAR2).

### **Limited Alternatives**

This refers to how lecturers had limited choice in terms of seeking alternative employment and leaving the University. They could find alternative opportunities but these were limited. Lecturers had been locked-in because they had invested their time at the University. There was no guarantee that they could get alternative employment inside or outside the country.

Some lecturers felt that by being at the University, they had already made an investment and you therefore had to stay put. This further promoted lock-in.

*Lecturers were reluctant to move because if you invest, as most of us did, in a doctorate, and getting yourself a job at the University, you don’t wish to relinquish all the effort you put into the build-up to that job* (SJR1).

Limited opportunities meant that there was no job guarantee if one chose to leave the institution. This was especially true for junior staff members.

*For many of the younger staff, they were not able to get the credentials and particularly the research publications which would make them competitive for posts outside [the country]. So again, many of them remained here because they did not have a choice (BCR1).*

### **Loyalty and Attachment**

For some, the desire to stay on was due to mere attachment and loyalty.

*I have a deep loyalty to this place because it gave me all the breaks and the opportunities of a significant nature that I would not have had in life. I wouldn't have had the career. I wouldn't have had the opportunities that I have if I hadn't landed at this University as a PhD souveniour (SJR1).*

Another participant concurred that attachment and loyalty contributed to staff lock-in:

*I have developed a deep attachment to the University. I think, like your own high school, you develop a deep attachment. I think there is that pride and attachment to an institution that has brought you up, given you a lot of knowledge and catered for your growing up. You cannot help but be attached to it (KSR1).*

Another staff member proclaimed his attachment:

*Lecturers and administrators developed a deep and lasting attachment. UR had so much promise and delivered magnificently. My wife and I left [the country] because the situation outside the University began to compromise our presence in the country, but we left the University itself with heart-rending regret and a deep sense of loss of friends, colleagues and a precious environment (WCR1).*



One interviewee explained that if you really are dying to leave an institution then there is something inherently wrong with that institution.

*The tendency is that we had developed roots, we had friends, we were familiar with the terrain, and we got attached. I know some lecturers who even when it was hot politically and they were threatened with deportation, they still wanted to stick around and hoped that good times would come back (KSR1).*

Resultantly, staff members did not see any reason for leaving the institution because it had become a way of life.

*For us it was either you stayed at this University or you left the country. That is basically what it was about. Or you went out of academic life completely. If you wanted to be at a University, this was the only University in Rhodesia (HAR2).*

Apart from loyalty, some lecturers stayed for a long time at the University because of the sense of achievement and influence that went with the job. A current lecturer revealed that,

*So a sense of achievement, small University like this one and as it was at that time, and the influence that you could have was phenomenal. Perhaps it is a case of hubris but nonetheless you would be consulted about issues that as a junior lecturer, if you were in England, nobody would even be in the slightest bit concerned about your opinion. So you had influence (SJR1).*

Others stayed just for the comfort offered by the institution: *“For a lot of lecturers, they came into Rhodesia with the intention of staying for a specified period of time and going back home afterwards. They soon found themselves enjoying the comfort levels...” (RRR1).*

Some stayed because they felt that there was work to be done:

*You find that there are things in life that you do for money and there are things where money doesn't matter. Sometimes that is referred to as altruism. It is to do with knowing that there is a job to be done, knowing that in spite of one's own limitation, that one can do it and standing your ground and doing it (LBR2).*

Staff lock-in greatly contributed to staff retention.

### **Students Lock-in**

#### *Living Conditions*

One interviewee said that the University provided a good living and learning environment and this contributed to student lock-in:

*For me, coming from the village in the rural areas, it was like I had reached heaven. It didn't look like there was anything that the University was not able to do for me. We had good facilities, good resources, and good lecturers. Everything seemed to work like clock-work (CUR2).*

Another student recounted the quality of life at UR with some nostalgia:

*When I grew up in the rural areas, breakfast was a hit or miss affair. We ate left-overs. We never had eggs for breakfast, let alone bacon, sausages and cereal. These were not known to us. Then I walked into this place. At 10am there was fine tea. There were urns all over this place. At lunch time we had a variety of presentations of food. I look at the menus they serve in the hotels now, and I try to convince myself that these hotels are doing better than what used to be [served] at Manfred, Swinton or Carr-Saunders dining halls, and I am not convinced. If the food was not a sufficient inspiration, you had someone making your bed for you. The sheeting was so good and you were meant to feel that you had arrived in a different world, and you belonged to a different class. They changed the linen almost daily. The atmosphere here was just fantastic (ZMR2).*

One interviewee also reminisced that,

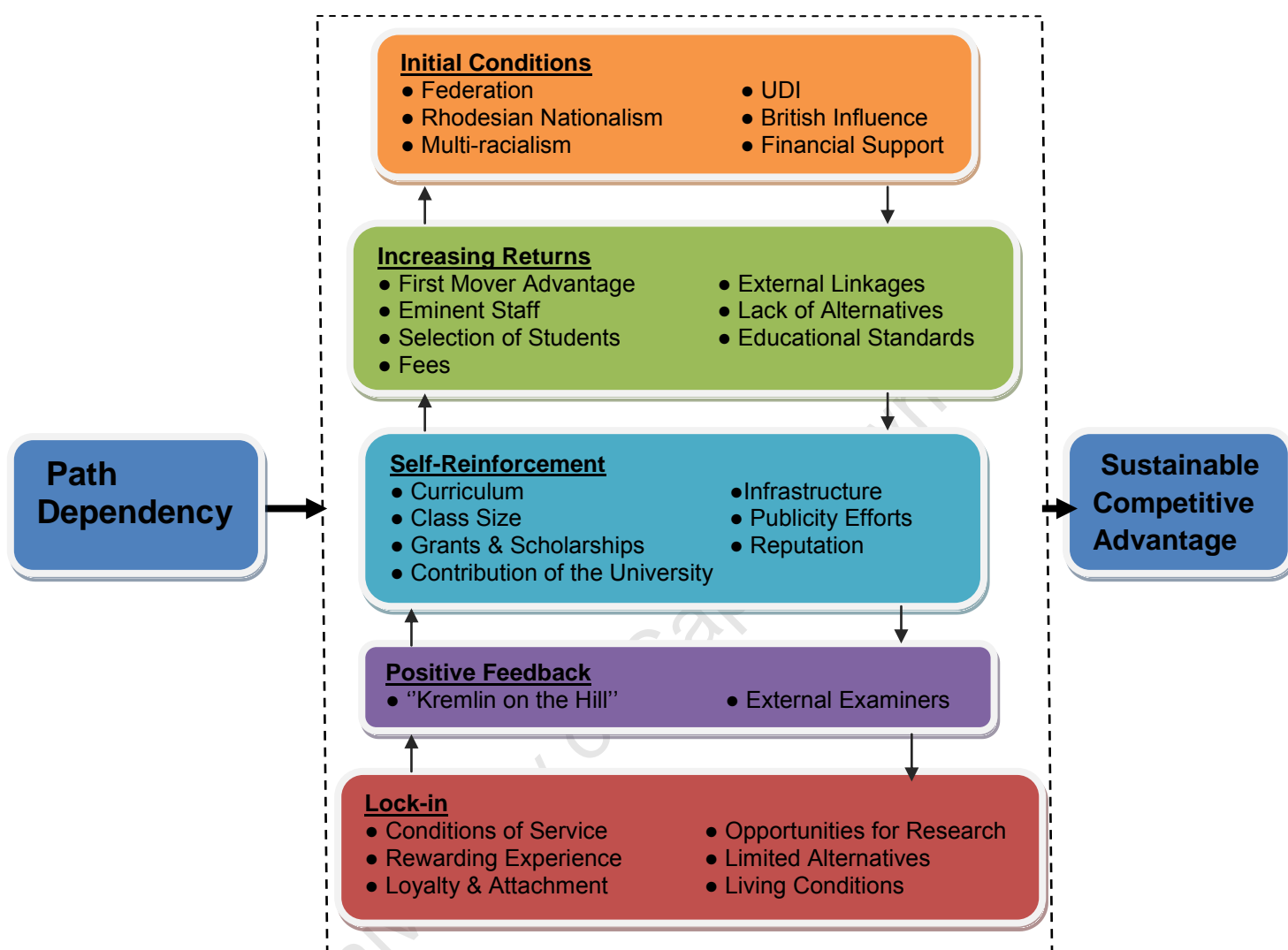
*When I was there at the University in 1973, the facilities were excellent; from hostels to classrooms. Tea was provided at 10 o'clock in the morning and at 4 o'clock in the afternoon. We would clean our hands using slices of bread. Chicken was served every other day. It was really an elitist establishment (ZRR2).*

Another participant echoed the above sentiments that the University was very elitist in its orientation. Thus good living conditions played a major role in promoting student lock-in.

*They [University authorities] were training us to be like Oxford and Cambridge [students]. We were the elite. We had a five-star hotel residence. We had our own lounge. We had waiters and cleaners. We were being trained to be very elitist. Can you imagine we never cleaned our own rooms or made our own beds or cooked our own food. When we had dinner we had to have a high table in a rotational way. We had to wear gowns to dress up for dinner like they do at Oxford (CFR2).*

A summary of the findings is presented in Figure 5.2 below. It also outlines the working theory.

**Figure 5.2: A Framework for Determining Path Dependency in the Evolution of the University of Rhodesia, 1945-1980**



**Source:** Author (The arrows that link the five categories vertically explain the fact that the framework is self-reinforcing).

### Conclusion

This Chapter discussed the findings of the study and presented the emerging themes. The study modified the framework of path dependency by adding 'initial conditions' as a major determinant of the evolution of the University of Rhodesia. The framework of path dependency emerged in the developed world where it has broad application. The gap that was identified in this study was whether this concept could be applied in emerging markets. Developed markets are generally characterised by relative political and economic stability

(Wright, Filatotchev, Hoskisson & Peng, 2005). This can facilitate the isolation and application of elements of path dependency, thus allowing for the use of this framework in the developed markets. However, the researcher felt that this framework would not hold up in emerging economies which are characterised by political and economic instability. The case institution emerged during times of political and economic volatility, risk and uncertainty, and so the researcher felt that the path dependency framework would be difficult to apply in this environment.

The data confirmed the influence of other elements of path dependency. For example, as part of increasing returns, the recruitment of highly qualified staff, external linkages and resultant educational standards, persuaded both staff and students to consider the University of Rhodesia as a destination of choice. Further, the superior curriculum, small class sizes and superb infrastructure at the University, helped to reinforce the positive image and reputation that the University enjoyed. The use of external examiners provided positive feedback and this helped to give a positive image of the University, while the conditions of service for lecturers and opportunities for research helped to suppress the consideration of alternatives by ensuring that lecturers had few choices.

The expanded framework added a new dimension of 'initial conditions', as the key determinant in the evolution of organisations, and how it shapes and directs the path and trajectory of their emergence. An improved conceptual framework of path dependency was revealed, that improves our understanding of contextual issues and dynamics shaping the evolution of organisations.

The next Chapter assesses whether UR was a successful organisation and whether UR's competitive advantage shows the influence of the dynamics of path dependency.

## **CHAPTER 6: PRESENTING THE EVIDENCE: ORGANISATIONAL SUCCESS AND PATH DEPENDENCY**

### **Introduction**

This study examined the evolution of UR in order to clarify patterns of path dependency that emerged, so as to provide an explanation for the foundation of the institution's competitive advantage. In this regard, it was important to assess whether the case institution was a successful organisation or not.

Chapter 2 provides a history of UR and sets a compelling rationale for the establishment of a unique institution. It is clear from the narrative that what the White Rhodesians wanted to build speaks of what a successful institution looks like. Driven by Rhodesian nationalism, UR was built on the premise that it had to be unique. The founders wanted to create a University that was attractive even to countries in the region. That is why the University attracted the best lecturers and students and used external examiners in their examination system. Given this background, it became imperative in this study, to establish the extent to which this institution met the characterisation of being a successful organisation. If the organisation was not successful, then we would expect to find initial conditions that define lack of success.

This chapter is divided into two sections. The first section makes an assessment of whether the UR was a successful organisation or not. In making this assessment, the researcher used Cameron's (1978; 1981; 1986) dimensions of measuring organisational effectiveness in institutions of higher learning. These dimensions were modified for purposes of this research. The second section assesses whether the evolution of UR exhibited identifiable characteristics of path dependency.

Two questionnaires were deployed to 80 respondents (former students, current and former academics and administrators) (see Appendices 7 & 8). The purposive sampling technique was used to select respondents who had

knowledge of the history of the University. The complete list of respondents evolved through the use of the snowballing technique (Yin, 1994).

In interpreting the data, the researcher categorised the responses as follows: *Strongly Disagree* and *Partially Disagree* denote respondents who disagreed with the statement, whilst *Strongly Agree* and *Partially Agree* denote respondents who agreed with the statements. Respondents who remained *Neutral* are discussed separately because they were skeptical and did not commit themselves to either category. The researcher used responses from the unstructured interviews to support the positions of respondents.

The researcher checked for the reliability of measures for both questionnaires using the Cronbach's alpha. This was done using the Statistical Package for Social Scientists (SPSS). In general, reliabilities of less than 0.6 are considered to be poor; those on the 0.7 range are acceptable; and those over 0.8 are good. As shown in the two Tables below, the questionnaire on Organisational Success had 15 items and a measure of 0.84, while that on Path Dependency had 32 items and a measure of 0.88. Thus the reliability of the measures used in this study can be considered to be good.

### **Organisational Success**

#### **Reliability Statistics**

Cronbach's Alpha	Number of Items
.836	15

### **Path Dependency**

#### **Reliability Statistics**

Cronbach's Alpha	Number of Items
.879	32

### Questionnaire on Organisational Success

The researcher tried to determine the relationship between any two questions in terms of responses. When the correlation is too high (e.g., 0.8), it means those who are in favour in one question also tend to be in favour in another question. As shown in the Table below, there is a mild positive correlation of 0.509 between Question 1 and Question 2. This means respondents tended to give either high or low rankings for a particular question. There is a very weak positive correlation of 0.018 between Question 2 and Question 7. This means respondents' views on these two questions were not related.

Inter-Item Correlation Matrix

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
Q1	1.000	.509	.556	.469	.121	.156	.090	.054	.084	.316	.579	.616	.265	.162	.137
Q2	.509	1.000	.685	.660	.187	.230	.018	.060	.321	.247	.550	.414	.281	.338	.313
Q3	.556	.685	1.000	.647	.139	.280	.152	.224	.313	.189	.620	.466	.260	.287	.210
Q4	.469	.660	.647	1.000	.224	.177	.178	.214	.393	.194	.578	.403	.229	.367	.261
Q5	.121	.187	.139	.224	1.000	.130	.102	.222	.076	.298	.093	.117	-.021	.068	.057
Q6	.156	.230	.280	.177	.130	1.000	.356	.377	.170	.221	.009	.112	.088	.160	.090
Q7	.090	.018	.152	.178	.102	.356	1.000	.615	.309	.153	.023	.114	.150	-.090	.022
Q8	.054	.060	.224	.214	.222	.377	.615	1.000	.267	.260	.090	.081	.159	.022	.090
Q9	.084	.321	.313	.393	.076	.170	.309	.267	1.000	.184	.217	.248	.182	.338	.420
Q10	.316	.247	.189	.194	.298	.221	.153	.260	.184	1.000	.062	.222	.173	.282	.426
Q11	.579	.550	.620	.578	.093	.009	.023	.090	.217	.062	1.000	.735	.440	.381	.299
Q12	.616	.414	.466	.403	.117	.112	.114	.081	.248	.222	.735	1.000	.564	.426	.422
Q13	.265	.281	.260	.229	-.021	.088	.150	.159	.182	.173	.440	.564	1.000	.320	.451
Q14	.162	.338	.287	.367	.068	.160	-.090	.022	.338	.282	.381	.426	.320	1.000	.616
Q15	.137	.313	.210	.261	.057	.090	.022	.090	.420	.426	.299	.422	.451	.616	1.000

The researcher also tried to determine the consistency of responses.

H1: Responses were consistent

Ho: Responses were not consistent

With a p-value of 0.00, as shown in the Table below, which is less than 5%, we reject Ho and conclude that responses were not consistent, i.e. respondents did not consistently give a high or low ranking for any question.



## ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between People	357.859	79	4.530		
Within People				22.585	.000
Between Items	234.422	14	16.744		
Residual	819.978	1106	.741		
Total	1054.400	1120	.941		
Total	1412.259	1199	1.178		

Grand Mean = 3.89

The researcher also tried to establish whether responses differed by a variable. For purposes of illustration, the researcher used the Faculty variable and the first question. If a confidence interval includes a 0, then we can conclude that there are no differences in our responses between any two Faculties. Since all the p-values are less than 5%, we conclude that responses did not differ by Faculty.

As shown in the Table below, the Faculties of Education and Science have a confidence interval which is negative and does not include a 0. Therefore, the responses in these two Faculties were different.

Multiple Comparisons							
Dependent Variable	(I) Faculty	(J) Faculty	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
UR was successful and prominent	Agriculture	Arts	.379	.667	.571	-.95	1.71
		Commerce	.200	.764	.794	-1.32	1.72
		Education	1.000	.713	.165	-.42	2.42
		Law	.500	.913	.585	-1.32	2.32
		Medicine	.000	.833	1.000	-1.66	1.66
		Science	.091	.702	.897	-1.31	1.49
		Social Studies	.667	.697	.342	-.72	2.06
		Administration	.714	.732	.332	-.74	2.17
	Arts	Agriculture	-.379	.667	.571	-1.71	.95
		Commerce	-.179	.442	.686	-1.06	.70
		Education	.621	.348	.079	-.07	1.32
		Law	.121	.667	.857	-1.21	1.45
		Medicine	-.379	.553	.495	-1.48	.72
		Science	-.288	.323	.375	-.93	.36
		Social Studies	.287	.313	.362	-.34	.91

		Administration	.335	.384	.386	-.43	1.10
Commerce		Agriculture	-.200	.764	.794	-1.72	1.32
		Arts	.179	.442	.686	-.70	1.06
		Education	.800	.509	.120	-.21	1.81
		Law	.300	.764	.696	-1.22	1.82
		Medicine	-.200	.666	.765	-1.53	1.13
		Science	-.109	.492	.825	-1.09	.87
		Social Studies	.467	.486	.340	-.50	1.44
		Administration	.514	.534	.339	-.55	1.58
Education		Agriculture	-1.000	.713	.165	-2.42	.42
		Arts	-.621	.348	.079	-1.32	.07
		Commerce	-.800	.509	.120	-1.81	.21
		Law	-.500	.713	.486	-1.92	.92
		Medicine	-1.000	.608	.105	-2.21	.21
		Science	-.909*	.410	.030	-1.73	-.09
		Social Studies	-.333	.402	.410	-1.14	.47
		Administration	-.286	.460	.536	-1.20	.63
Law		Agriculture	-.500	.913	.585	-2.32	1.32
		Arts	-.121	.667	.857	-1.45	1.21
		Commerce	-.300	.764	.696	-1.82	1.22
		Education	.500	.713	.486	-.92	1.92
		Medicine	-.500	.833	.550	-2.16	1.16
		Science	-.409	.702	.562	-1.81	.99
		Social Studies	.167	.697	.812	-1.22	1.56
		Administration	.214	.732	.770	-1.24	1.67
Medicine		Agriculture	.000	.833	1.000	-1.66	1.66
		Arts	.379	.553	.495	-.72	1.48
		Commerce	.200	.666	.765	-1.13	1.53
		Education	1.000	.608	.105	-.21	2.21
		Law	.500	.833	.550	-1.16	2.16
		Science	.091	.594	.879	-1.09	1.28
		Social Studies	.667	.589	.262	-.51	1.84
		Administration	.714	.630	.261	-.54	1.97
Science		Agriculture	-.091	.702	.897	-1.49	1.31
		Arts	.288	.323	.375	-.36	.93
		Commerce	.109	.492	.825	-.87	1.09
		Education	.909*	.410	.030	.09	1.73
		Law	.409	.702	.562	-.99	1.81
		Medicine	-.091	.594	.879	-1.28	1.09
		Social Studies	.576	.381	.135	-.18	1.34
		Administration	.623	.441	.162	-.26	1.50
Social Studies		Agriculture	-.667	.697	.342	-2.06	.72

		Arts	-.287	.313	.362	-.91	.34
		Commerce	-.467	.486	.340	-1.44	.50
		Education	.333	.402	.410	-.47	1.14
		Law	-.167	.697	.812	-1.56	1.22
		Medicine	-.667	.589	.262	-1.84	.51
		Science	-.576	.381	.135	-1.34	.18
		Administration	.048	.434	.913	-.82	.91
	Administration	Agriculture	-.714	.732	.332	-2.17	.74
		Arts	-.335	.384	.386	-1.10	.43
		Commerce	-.514	.534	.339	-1.58	.55
		Education	.286	.460	.536	-.63	1.20
		Law	-.214	.732	.770	-1.67	1.24
		Medicine	-.714	.630	.261	-1.97	.54
		Science	-.623	.441	.162	-1.50	.26
		Social Studies	-.048	.434	.913	-.91	.82

### Questionnaire on Path Dependency

The researcher tried to determine the consistency of responses. With a p-value of 0.00, as shown in the Table below, which is less than 5%, we conclude that responses were not consistent, i.e. respondents did not consistently give a high or low ranking for any question.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig
Between People	636.621	79	8.058		
Within People					
Between Items	489.428	31	15.788	16.172	.000
Residual	2390.916	2449	.976		
Total	2880.344	2480	1.161		
Total	3516.965	2559	1.374		

Grand Mean = 3.64

The researcher also tried to determine the relationship between any two questions in terms of responses. When the correlation is too high (e.g., 0.8), it means those who are in favour in one question also tend to be in favour in another question. As shown in Appendix A, generally there is a mild positive

correlation, i.e., respondents tended to give either high or low rankings for a particular question.

### **Demographics of Respondents**

As shown in Table 6a below, 73.8% of respondents were males and 26.3% were females. Tables 6b and 6c provide profiles of respondents by current and former profession respectively. Table 6b shows that 88.2% of the respondents were current academics with 11.8% being current administrators. Most Universities tend to have more academic than administrative staff because the role of administrative staff at University is that of a supporting nature. The staff composition meant that respondents could give informed responses given their experience working at the University.

Table 6c shows that 69% of the respondents were former students and the rest were former academics and administrators. Respondents who were former students could also have been former and current administrators and academics. Therefore, there could have been double counting on this demographic. However, with 69% of respondents being former students and the rest being academics and administrators, it is evident that there is a balance in the mix of respondents. Responses are therefore representative of the cross-section of the population.

**Table 6a: Respondents by Sex**

<b>Sex of Respondent</b>	<b>Percent Distribution n(%)</b>
Male	59(73.8)
Female	21(26.3)
<b>Total</b>	<b>80</b>

**Table 6b: Respondents by Current Profession**

<b>Current Profession</b>	<b>Percent Distribution n(%)</b>
Academic	30(88.2)
Non-academic(administrators)	4(11.8)
<b>Total</b>	<b>34</b>

**Table 6c: Respondents by Former Profession**

Former Profession	Percent Distribution n(%)
Academic	14(24.1)
Non-academic (administrators)	4(6.9)
Student	40(69.0)
<b>Total</b>	<b>58</b>

**Table 6d: When did you Join UR?**

Year joined UR	Percent Distribution n(%)
1950 to 1959	7(9.8)
1960 to 1969	36(45.0)
1970 to 1980	37(46.3)
<b>Total</b>	<b>80</b>

As shown in Table 6d above, 54.8% of the respondents joined the University between 1950-1969 and 46.3% joined between 1970-1979. With over half the respondents having so much experience under their belt, we are confident of the reliability of their ratings.

**Table 6e: Highest Level of Education**

Educational Qualification	Percent Distribution n(%)
Doctorate Degree	32(40.0)
Master Degree	26(32.5)
Bachelor Degree	22(27.5)
<b>Total</b>	<b>80</b>

Table 6e above shows the level of education of respondents. With 72.5% having either a Masters or Doctoral degree, this increases our confidence that the submissions of respondents were well thought-out.

**Table 6f: Respondents by Faculty**

Faculty	Percent Distribution n(%)
Agriculture	2(2.5)
Arts	29(36.3)
Commerce	5(6.3)
Education	9(11.3)
Law	2(2.5)
Medicine	3(3.8)
Science	11(13.8)
Social Studies	12(15.0)
Administration	7(8.8)
<b>Total</b>	<b>80</b>

Table 6f above shows the Faculties to which respondents belonged. There is an adequate spread by Faculty with Arts having the highest percentage of

36.3%, followed by Social Studies with 15%, Science with 13.8% and Education with 11.3%. The researcher was able to obtain balanced opinions and perspectives from a representative group of participants.

Below the researcher discusses the major findings from the questionnaire on organisational success.

### **Was UR a Successful Organisation?**

Below we present evidence from respondents which seek to establish whether UR was a successful organisation or not.

**Table 6.1: UR was a Successful and Prominent Institution of Higher Education**

<b>Responses</b>	<b>Percent Distribution</b>	<b>n(%)</b>
Strongly disagree	2(2.5)	
Partially disagree	3(3.7)	
Neutral	2(2.5)	
Partially agree	15(18.8)	
Strongly agree	58(72.5)	
<b>Total</b>	<b>80</b>	

As shown in Table 6.1 above, 91% of the respondents agreed that UR was a successful and prominent institution of higher education. Only 6.2% disagreed with the statement while 2.5% decided to sit on the fence. When interviewed on this issue, most respondents agreed that the University was a successful and prominent institution. Its linkage with London and Birmingham Universities gave it some degree of prestige. It recruited high level internationally qualified academics like Professor Ranger and Roberts. There was also a selective intake of students. The system of external examiners ensured that standards were kept high over time. The University had a well developed physical and administrative infrastructure. One current lecturer had this to say, *“The offices were big. The laboratories were good. It was a very attractive place. When visitors from abroad came here, they were always impressed by the physical infrastructure”* (RRR2).

**Table 6.2: Students at UR were Satisfied With their Educational Experiences at the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	1(1.3)	
Neutral	1(1.3)	
Partially agree	40(50.0)	
Strongly agree	36(45.0)	
<b>Total</b>	<b>80</b>	

In response to whether students at UR were satisfied with their educational experiences or not, 95% of the respondents agreed that they were satisfied, while 3.8% disagreed, with 1.3% remaining neutral. In an interview with one former student, she said,

*Facilities and learning resources were good. The library was very well stocked. Our lecture rooms were very good. We had not seen anything like it coming from a rural boarding school (CUR2).*

Another former student concurred: *“The classes were not big. Thirty students would have been an extraordinary number for a class. The lecturers gave very close attention to students” (ZMR2).* Yet another student expressed similar sentiments:

*The University offered good degrees and affordable tuition. In fact, you knew that if you got your degree you were assured of a job. You didn’t have to spend two years looking for a job if you were a graduate. And also in society, if you are a graduate, it enhanced you economic and social status. Most students from the University have found a place in the world. To me that proves a point that they had sellable degrees (KSR1).*

**Table 6.3: Students at UR Achieved High Levels of Academic Growth and Development**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	-	
Neutral	3(3.8)	
Partially agree	22(27.5)	
Strongly agree	53(66.3)	
<b>Total</b>	<b>80</b>	

Table 6.3 above shows results of whether students achieved academic growth and development at UR. The majority (93.8%) of the respondents agreed with the statement, with 2.5% disagreeing and 3.8% remaining neutral. In support of this statement, one former academic commented thus:

*I remember we had a terrible Physics lecturer and as students in our arrogance, we went to the Prof. [Principal of the University] to talk about this terrible lecturer. The Prof. just looked at us and asked, "Do you have a syllabus?" We said, "Yes". He asked again, "Is there a library on the campus?". The answer was "Yes". He said, "So what are you complaining about?". That was the attitude. We were there to learn not to be taught and for the academic staff, research was very important (DRR1).*

**Table 6.4: Students at UR were Well Prepared for Entry into Occupations and Advancement in their Careers after Graduation**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	6(7.5)	
Neutral	10(12.5)	
Partially agree	30(37.5)	
Strongly agree	32(40.0)	
<b>Total</b>	<b>80</b>	

As shown in Table 6.4 above, the majority (77.5%) of respondents agreed that the University prepared students for future careers while 12.5% remained neutral, with 10% disagreeing with the statement. However, we should not lose sight of the fact that most Black students were marginalised in the society. They were forced to enter into occupations which were not of their choice. One former student recounted this experience:

*As Africans, we were channelled into teaching jobs. Safely you would go into the Ministry of Education. You were not a threat. Those of us who defied and took Economics, you would never get a job. If you go into industry, you were told that you were over-qualified because if you work here you will tell a White Secretary what to do. That is not the order of things as God ordained. White ladies will not share tea cups with you. We cannot treat you like that*



*because you are a graduate. So you cannot get a job here because you are over-qualified (CAR1).*

**Table 6.5: UR put Sufficient Emphasis on Non-academic Areas, Non-career Oriented Areas of Professional Development in their Teaching**

Responses	Percent Distribution	n(%)
Strongly disagree	8	10.0
Partially disagree	17	21.3
Neutral	31	38.8
Partially agree	19	23.8
Strongly agree	5	6.3
<b>Total</b>	<b>80</b>	

Table 6.5 above shows whether UR put sufficient emphasis on non-academic areas. Only 30.1% of the respondents agreed with the above statement, while 31.3% of the respondents disagreed with the statement. The majority of respondents (38.8%) remained neutral. The results show that UR did not put emphasis on non-academic areas in their programmes. One former student revealed that,

*Whites could go to Harare and Bulawayo Polytechnic Colleges and the technical colleges, and these were not open to Blacks. So they [Whites] had the opportunity to train as artisans. The University of Rhodesia did not have many professional Faculties. The first lawyers who graduated from the University did not do the fourth year, which allows them to understand how courts operate. We did not have other professional degrees like Business Administration (CER1).*

**Table 6.6: Faculty and Administrators were Satisfied with their Employment at the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	3	3.8
Partially disagree	2	2.5
Neutral	20	25.5
Partially agree	36	45.0
Strongly agree	19	23.8
<b>Total</b>	<b>80</b>	

**Table 6.7: UR put Sufficient Emphasis on Faculty Publications**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	7(8.8)	
Neutral	27(33.8)	
Partially agree	27(33.8)	
Strongly agree	17(21.3)	
<b>Total</b>	<b>80</b>	

**Table 6.8: UR put Sufficient Emphasis on Attendance at Conferences**

Responses	Percent Distribution	n(%)
Strongly disagree	1(1.3)	
Partially disagree	1(1.3)	
Neutral	28(35.0)	
Partially agree	27(33.8)	
Strongly agree	23(28.8)	
<b>Total</b>	<b>80</b>	

Tables 6.6 to 6.8 above show that the majority (68.8%) of respondents agreed that faculty and administrators were satisfied with their employment, while 55.1% agreed that UR put sufficient emphasis on faculty publications, with 62.6% agreeing that UR put sufficient emphasis on attendance at conferences. To that extent, the majority of respondents confirmed that UR was a successful organisation in these areas.

In an interview, one former student had this to say:

*I think there was a very good community life here. There was theatre, there was a choir – all that sort of thing which builds a community seems to have gone [now]. The staff were very much part of that. There was a great interaction between students and staff, and I think that is something we are really missing now (WVR1).*

Besides the good community life, there were benefits like contact and sabbatical leave. This enabled staff to benefit from academic contacts and exposure abroad. The classes were small so were the Faculties. People knew each other, both staff and students. There were also opportunities to attend conferences and to participate in research seminars. Research funds were available. For administrators the salaries were good and there

were housing and other benefits. There were good facilities at the University of Rhodesia – sports facilities, good library and a generally well developed infrastructure. So both administrators and faculty were satisfied with their employment at the University – evidence that the UR was a successful organisation.

**Table 6.9: UR put Sufficient Emphasis on Teaching at the ‘Cutting Edge’**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	4(5.0)	
Neutral	13(16.3)	
Partially agree	40(50.0)	
Strongly agree	23(28.8)	
<b>Total</b>	<b>80</b>	

Table 6.9 above reveals that 78.8% of respondents agreed that UR put sufficient emphasis on teaching, with 5% disagreeing with the idea, while 16.3% remained neutral. The statistics provide ample evidence that UR put emphasis on “teaching at the cutting edge”. First, the University creamed the best students from secondary schools in the country. It demanded students to have ‘A’ level qualifications for entry into the institution when South African Universities were contended with Matric qualification to enter University. It also had the money to recruit the best lecturers to teach at the University. Because of its linkage with London and Birmingham and the external examination system, the University College of Rhodesia had to engage in quality teaching.

One current lecturer reminisced:

*The London link was fundamental in keeping standards high. That meant that we had to meet the requirements of London and London standards were, if anything, higher than most British Universities. This University [of Rhodesia] just had the rhythm. There were external examiners. Every paper was marked. It wasn’t like external examiners today who just come and dip in. If there were any deficiencies, these were brought home to us and we had to repair them either by changing the syllabus or changing the*

*staff and doing what was required (RRR2).*

One former student revealed that,

*People want to go where they can get maximum attention from their tutors and from the facilities so that when you go to a library, you don't want to be told that the book has been borrowed and you can't access it for the next two months. Meanwhile, you have an assignment that is due. The [student] numbers were fairly well matched with the resources and the teaching staff. There were fewer students so that in tutorials, by the time you went through the tutorials, everybody would have had a chance to contribute. You could have a one-on-one session with your lecturer. This enhanced the quality of studies (KSR2).*

The quality of teaching at UR was very high – further evidence that the institution was a successful organisation.

**Table 6.10: UR was an Open Institution Which Interacted Well with its External Environment**

Responses	Percent Distribution	n(%)
Strongly disagree	8(10.0)	
Partially disagree	14(17.5)	
Neutral	9(11.3)	
Partially agree	32(40.0)	
Strongly agree	17(21.3)	
<b>Total</b>	<b>80</b>	

As shown in Table 6.10 above, the majority (61.3%) of respondents were of the opinion that the UR was an open institution which interacted well with its external environment. About a third of the respondents (27.5%) disagreed with the idea, while only 11.3% remained neutral. Further evidence to support this assertion is provided by one former student: *“The University was well regarded by the majority of the people. The business community was sympathetic. The Rhodesia Herald sponsored some students to come and study at the University” (CAR1).*

A current lecturer concurred with the former student:

*We used to have Open Days and Summer School. We used to have opportunities where people came here for a week and have lectures on whatever, whether it was gardening. I gave a series of lectures on Einstein. Open Days and Summer Schools were tremendous for the public to come and see what a University does, because it was a new University when the population, both Black and White, didn't really know what the University was unless they had been to University themselves. We did have definite intentions to make ourselves understood and show ourselves off in a good light (PFR1).*

Departments were encouraged to make themselves known to the community through public lectures:

*The Faculty of Agriculture was encouraged to talk to the Rhodesia National Farmers' Union, the research stations, and so on. In History we created a History Association which was run through the Department. Everyone was encouraged to have some sort of connection with the constituency relevant to their discipline. We were greatly encouraged by every Principal [Vice-Chancellor] and by Deans that we should be part of the community (RRR1).*

Apart from the above interactions, the backing of the Universities of London and Birmingham was an inestimable positive. Without the backing of these Universities, the University College of Rhodesia and Nyasaland would not have flourished. Although race relations deteriorated on campus as political issues came to the fore, the University became a source of pride rather than suspicion, as it began to feed home-grown professionals into the community.

**Table 6.11: UR was able to Attract High Quality Students**

<b>Responses</b>	<b>Percent Distribution</b>	<b>n(%)</b>
Strongly disagree	3(3.8)	
Partially disagree	3(3.8)	
Neutral	8(10.0)	
Partially agree	22(27.5)	
Strongly agree	44(55.0)	
<b>Total</b>	<b>80</b>	

**Table 6.12: UR was able to Attract High Quality Faculty**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	4(5.0)	
Neutral	9(11.3)	
Partially agree	29(36.3)	
Strongly agree	36(45.0)	
<b>Total</b>	<b>80</b>	

The majority (82.5%) of the respondents shown in Table 6.11 above agreed that UR was able to attract high quality students. Almost the same percentage of respondents (81.3%) as shown in Table 6.12 above agreed that UR was able to attract high quality Faculty. This provides overwhelming evidence that respondents felt that the UR was a successful organisation.

Because of its reputation, the University was able to attract high quality students and lecturers. Evidence to this effect is provided by one former lecturer: *“Universities of South Africa quite bluntly were not of the same class. They were a different order of fish, never trying to achieve comparable standards [compared to University of Rhodesia] until at a very late point”* (ANR1).

A former student concurred: *“The facilities and learning resources were good. The library was very well stocked. Our lecture rooms were very good. We had not seen anything like it coming from a rural boarding school”* (CUR2).

Quality teaching and the reputation that went with it were the hallmark of the University. This provides further evidence of a prominent institution. One former student had this to say:

*When you compared with Universities that were further north of us that had been operating under independent governments, the quality was going down. Most of the students trekked down here to what looked like a premier University where things still worked* (MMR2).

**Table 6.13: UR was able to Attract Financial Support**

Responses	Percent Distribution	n(%)
Strongly disagree	2(2.5)	
Partially disagree	7(8.8)	
Neutral	22(27.5)	
Partially agree	24(30.0)	
Strongly agree	25(31.3)	
<b>Total</b>	<b>80</b>	

Table 6.13 above shows that 61.3% of respondents agreed that UR was able to attract financial support. Only 11.3% disagreed with the statement while 27.5% remained neutral.

The University was able to attract financial support because of its reputation as revealed by a former student:

*The diversity of sources of funding meant that not one source could dictate terms and the University maintained its autonomy and academic freedom, making it a marketplace of many contrasting ideas – a fact which made it attractive to both staff and students (ZRR2).*

A former administrator revealed that commerce and industry was very supportive of the University: *“The Government in pre-UDI was very supportive, post-UDI perhaps less supportive, but nevertheless still pumped reasonable money in. Commerce and industry supplied scholarships and cadetships” (BRR2).*

A former lecturer concurred:

*The infrastructure helped to attract lecturers and students to join the University because an enormous amount of money from Britain was poured into the University. There was an enormous amount of money for the development of the Science Faculties and later on the Medical School. There were individuals who gave money and built various halls of residence and Faculties. The University was able to attract a great deal of funding in areas like scientific tropical medicine, agriculture and in fields they knew there were first grade scientists (CAR2).*

**Table 6.14: UR had Good Relations with its Students**

Responses	Percent Distribution n(%)
Strongly disagree	7(8.8)
Partially disagree	19(23.8)
Neutral	12(15.8)
Partially agree	27(33.8)
Strongly agree	15(18.8)
<b>Total</b>	<b>80</b>

Table 6.14 above shows respondents' views on whether UR had good relations with students. In response to the question, 52.6% of respondents answered in the affirmative, while 39.8% disagreed with the statement, with 15% remaining neutral. While slightly more than 50% felt that students had good relations with UR, this does not provide an unambiguous endorsement of the statement. Further corroborative evidence by interviewees indicated that not many students were satisfied with the UR's relations with students. It is very much a reflection of the political polarisation of the society at the time, as it was evidence of an institution operating in a racially divided society.

Black students, especially, had issues with the University administration. A former student revealed this relationship with University authorities:

*Some of the areas that would concern me, even now, looking back, are that it [the University] was very Eurocentric in terms of values and culture. There was need to have a cross-cultural process that would allow for the absorption of Africans much more meaningfully. We were forced to internalise some of the European values. The Whites dominated the institutions like student associations because a lot of us had problems with confidence, problems with self-esteem issues, and problems with understanding some of the value systems. We were intimidated by the mixed company. I remember struggling to participate in class because I was not confident with my English (CUR2).*

Another former student expressed his displeasure with the issue of accommodation on campus.



*I came into the University in 1959. Some of the things that were very disappointing to the Blacks who had been told that this was a multi-racial University were that the halls of residence were separated. You had Blacks in one area and Whites in another. The one girl who came into the University in the first two years lived with Black boys because she couldn't live with the White girls in Swinton Hall. I think that was ridiculous. If you wanted to have a University which was multi-racial, you stick with the multi-racial University, period. Those who didn't want it would have to go elsewhere (SCR2).*

Yet another former student felt that the University became notorious rather than reputable:

*In practice it [the University] had strong racist elements in its operations. For example, the admissions process was lopsided in favour of Whites. Here was the University of Rhodesia which aspired to be in London which did not take into account, even at curriculum level, the environment in which it was operating. So it was a White University in an African continent (ZRR2).*

A former student provided further evidence to this effect:

*Black students were said to be noisy and mischeavous. They drank beer and brought prostitutes on campus. One of the proposals that caused the 1973 chimukwembe demonstration was that African students should be relocated to Gwelo (now Gweru), and Gwelo [Gweru] Teachers' College be turned into a campus for Africans, because Africans could not compete academically with Whites, and therefore they should have their own institution (ZMR2).*

The relations between the University and students (especially Blacks) were not very amicable.

**Table 6.15: UR had Good Relations with its Faculty**

Responses	Percent Distribution	n(%)
Strongly disagree	1	1.3
Partially disagree	8	10.0
Neutral	27	33.8
Partially agree	31	38.8
Strongly agree	13	16.3
<b>Total</b>	<b>80</b>	

From the evidence presented by respondents in Table 6.15 above, 55.1% agreed that the UR had good relations with its Faculty, while 11.3% disagreed, with 33.8% remaining skeptical about the statement. Again the statistics do not show an unambiguous endorsement of the good relations. One current lecturer commented thus:

*I had arrived here just after deportations had taken place in the 1960s. In Africa Unity Square there were demonstrations. Professor Ranger was part of those. One member of the Department of English was deported at that time. There were serious battles (LBR1).*

Another concurred: *“Political opposition to UDI meant that other staff left because they were deported or made to feel uncomfortable” (RRR2).* Below, the researcher discusses the major findings from the questionnaire on path dependency.

### **Did the Evolution of UR Display Characteristics of Path Dependency?**

Below we present evidence from respondents which seek to establish whether UR exhibited characteristics of path dependency in its evolution.

### **Initial Conditions**

**Table 6A1: The Establishment and Subsequent Rise to Prominence of UR Started as a Small Idea**

Responses	Percent Distribution	n(%)
Strongly disagree	10	12.5
Partially disagree	9	11.3
Neutral	24	30.0
Partially agree	18	22.5
Strongly agree	19	23.8
<b>Total</b>	<b>80</b>	

As shown in Table 6A1 above, 46.3% of respondents agreed that the founding of UR started as a small idea while 23.8% disagreed with the statement. Thirty per cent decided to remain neutral. This could have been a result of differences in respondents' understanding of a 'small idea'.

In an interview with a current academic, he revealed that the idea of establishing a University was initially triggered by the need to have "...a *University for those three countries [of the Federation] following this policy of partnership between the races*" (CAR1). Other reasons revealed by participants included the need to develop manpower for the region, the British influence and the need to establish an institution that would be a departure from the concept of separate development as espoused by South Africa. It would have been difficult in those days to think that an institution with such humble beginnings would grow into a prominent institution that the UR was to become.

**Table 6A2: Early Developments in the Founding of UR had a Significant Influence on the Future Success of the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	1(1.3)	
Partially disagree	1(1.3)	
Neutral	10(12.5)	
Partially agree	29(36.3)	
Strongly agree	39(48.8)	
<b>Total</b>	<b>80</b>	

The majority (85.1%) of respondents agreed with the statement, while 2.6% disagreed, with 12.5% deciding to remain neutral. Some of the early developments that significantly influenced the future success of the institution include UDI. According to one current lecturer,

*... its [UDI] major political and economic consequences were the crisis of 1966 when a number of University lecturers were deported. The University was seen as a hotbed of radicalism and opposition. The University could no longer get the support that it was getting academically internationally (BCR1).*

Some of the early developments included the granting of the Royal Charter which ushered in multi-racialism. This meant that there was not going to be

any discrimination on campus. UR's linkage with London and Birmingham Universities and the use of external examiners also ensured that standards would remain high over time.

**Table 6A3: UR Structure, Processes and Decisions Still Bear Imprints of its Past**

Responses	Percent Distribution	n(%)
Strongly disagree	4	(5.0)
Partially disagree	5	(6.3)
Neutral	13	(16.3)
Partially agree	39	(48.8)
Strongly agree	19	(23.8)
<b>Total</b>	<b>80</b>	

As shown in Table 6A3 above, 72.6% of the respondents agreed that UR's structure, processes and decisions bear imprints of its past. Only 11.3% disagreed with the statement, while 16.3% remained neutral. In interviews with former students, academics and administrators, it emerged that a number of decisions and processes have had an enduring effect on the development of UR. The decision to remain multi-racial has endured over time. The linkages with London and Birmingham Universities were maintained up until the early 1970s. This helped to give respectability to the programmes that were being offered at the University. The 'A' level requirement for University entrance and the use of external examiners have also endured and this has helped to keep standards high.

**Table 6A4: UR was an Institution that was Characterised by Rationality, Formality and Order, Mixed with Intuition, Informality and Disorder**

Responses	Percent Distribution	n(%)
Strongly disagree	3	(3.8)
Partially disagree	5	(6.3)
Neutral	28	(35.0)
Partially agree	31	(38.8)
Strongly agree	13	(16.3)
<b>Total</b>	<b>80</b>	

**Table 6A5: UR was able to find Solutions to its Problems Through Experimentation**

Responses	Percent Distribution	n(%)
Strongly disagree	6(7.5)	
Partially disagree	7(8.8)	
Neutral	27(33.8)	
Partially agree	30(37.5)	
Strongly agree	10(12.5)	
<b>Total</b>	<b>80</b>	

**Table 6A6: UR was able to find Solutions to its Problems through Self-organisation**

Responses	Percent Distribution	n(%)
Strongly disagree	4(5.0)	
Partially disagree	6(7.5)	
Neutral	22(27.5)	
Partially agree	32(40.0)	
Strongly agree	16(20.0)	
<b>Total</b>	<b>80</b>	

Table 6A4 to 6A6 ascertain whether the UR was a complex organisation, a concept associated with initial conditions in path dependency. As shown in Table 6A4, 55.1% of the respondents agreed that UR was characterised by both rationality and disorder. In Table 6A5, 50% of the respondents agreed that UR was able to find solutions through experimentation, while 60% of respondents in Table 6A6 agreed that the University was able to find solutions through self-organisation.

One of the experiments which the University embarked upon was to create a “multi-racial island of learning” which was surrounded by an otherwise segregated society. In an interview with a former student, she said,

*Dr Barbara Douglas [warden] decided that she was going to ask every White girl if she objected to having a Brown [girl] or a Black [girl] in her corridor. So a survey was done and some objected and some did not object. We were integrated in such a way that those White girls who didn't object integrated with us and those who objected had their own 'White' corridors. In the men's residences the same thing happened. Those who would not integrate were put in Manfred Hodson Hall and those who did not object were put in*

*Carr-Saunders Hall (CFR2).*

While UDI offered a unique challenge to the University, the institution was able to self-organise and emerge from the situation. The first challenge that UDI posed was whether the University of London would continue recognising the degrees of the University of Rhodesia, when the country had disobeyed the Queen Mother by undertaking a rebellion. The second was that UDI questioned the identity of the University and almost threatened its existence by questioning its status and standards. However, no fundamental ruptures took place and the University was able to sail smoothly into the University of Rhodesia in 1970 from the University College of Rhodesia. Further, the Universities of London and Birmingham did not cut off links with the University College of Rhodesia. In fact, the two Universities argued that their presence would dilute the racist strain that was tied to UDI.

**Increasing Returns**

**Table 6B1: Students, Faculty and Administrators were Attracted to UR because of its Reputation as an Institution of Higher Education**

Responses	Percent Distribution	n(%)
Strongly disagree	1(1.3)	
Partially disagree	3(3.8)	
Neutral	3(3.8)	
Partially agree	30(37.5)	
Strongly agree	43(53.8)	
<b>Total</b>	<b>80</b>	

Table 6B1 above shows that 91.3% of respondents agreed that UR's reputation attracted students, Faculty and Administrators. Only 5.1% disagreed with the statement, while 3.8% elected to remain neutral.

Students and lecturers were attracted to the University because of its reputation as an institution of higher education. First, University authorities managed to attract good lecturers from outside the country. The University also had excellent facilities. One former student said in this regard,

*When I was there at the University in 1973, the facilities were excellent; from hostels to classrooms. Tea was provided at 10 o'clock in the morning and at 4*

*o'clock in the afternoon. We would clean our hands using slices of bread. Chicken every other day. It was really an elitist establishment (ZRR2).*

The University had small classes. This made it easier to manage and students had quality time with lecturers, thus enhancing the quality of studies. It had good infrastructure and had linkages with external Universities. The linkages enabled the University to benefit from the tradition of depth and scholarship associated with London and Birmingham Universities. All these factors helped the institution to attract staff and students and it was therefore regarded as a successful institution.

**Table 6B2: UR acted as a Magnet that Attracted Complementary Organisations and Institutions to Develop a Cluster in the Capital City in Proximity to the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	8(10.0)	
Partially disagree	9(11.3)	
Neutral	31(38.8)	
Partially agree	18(22.5)	
Strongly agree	14(17.5)	
<b>Total</b>	<b>80</b>	

**Table 6B3: As More Organisations and Institutions Developed in the Capital City, the Development of UR as a Successful Institution was Further Boosted**

Responses	Percent Distribution	n(%)
Strongly disagree	6(7.5)	
Partially disagree	4(5.0)	
Neutral	20(25.0)	
Partially agree	28(35.0)	
Strongly agree	22(27.5)	
<b>Total</b>	<b>80</b>	

Table 6B2 above shows that 40% of the respondents agreed with the statement that UR attracted complementary organisations, while 21.3% disagreed with the statement, with 38.6% of the respondents remaining neutral. Table 6B3 above shows that 62.5% of the respondents agreed that developments in the city (Salisbury, now Harare) boosted the growth of the University. These statements were meant to assess how the external environment helped UR to

achieve growth. The results in Figure 6B2 above mean that respondents had no immediate recollection of complementary institutions associated with the University hence the high number of skeptical respondents.

Evidence that the University acted as a magnet to attract complementary institutions is provided by one current lecturer:

*The University had another kind of effect on institutions, your tertiary or post-school training institutions – education, agriculture, technical, and theology, who were issuing diplomas. The whole range now had the opportunity and incentive to establish a link with, and come under the wings of, this institution [University] and that is the most significant, not new, but the advancing of the growing of existing institutions which could now benefit in many ways and advance or upgrade their training (BCR1).*

Further, developments in the city helped to boost the growth of UR. The fact that Salisbury (now Harare) was the capital city of the Federation meant that UR benefitted as well. In an interview, a former lecturer said,

*The formation of the Federation in 1953 up to 1963 gave the University College of Rhodesia and Nyasaland an opportunity to develop. Federation was a period characterised by rapid growth and expansion in terms of staffing, buildings and student intake. You might want to know that most of the copper roofing that the University has, the copper came from the Copper Belt of Zambia. During the Federation period the capital city of the Federation, Salisbury (now Harare) became known as bambazonke (acquiring anything and everything) because it was getting cheap labour from Malawi, resources from Zambia, etc. That is when the University grew rapidly, starting off in 1957 with the Faculty of Arts. It moved into Law, Business, etc. (ZRR2).*



**Table 6B4: As UR Became more Successful as an Institution, the Development of Alternative Institutions of Higher Learning was Further Suppressed**

Responses	Percent Distribution n(%)
Strongly disagree	18(22.5)
Partially disagree	12(15.0)
Neutral	13(16.3)
Partially agree	27(33.8)
Strongly agree	10(12.5)
<b>Total</b>	<b>80</b>

Table 6B4 above shows that 46.3% of the respondents agreed that UR suppressed the development of other institutions. Only 16.3% of the respondents decided to sit on the fence with 37.5% disagreeing with the statement. This can be explained by the fact that UR was a monopoly organisation so respondents felt that there was no basis for making a comparison, hence the skepticism of some respondents. The other challenge was to identify the reasons that could explain why the country had only one University for the period up to independence in 1980. As a result some respondents decided to sit on the fence (16.3%) or to disagree with the statement altogether (37.5%).

The University was the only institution and it received a lot of support, financial and otherwise. In interviews with participants, it was revealed that there were few secondary schools for Africans that offered 'A' level classes and so the demand for University education was artificially controlled. This helped to develop the University as an elitist institution with high standards. The University served the needs of a small White minority population. To that extent, it served its purpose, making the introduction of a similar institution unnecessary.

In support of the above statement, a former lecturer said,

*The pressure to start other institutions was never there because when they [Whites] looked at the population, they saw more of the White needs and not those of Blacks. In any case, there were not many high schools for Blacks in the country. That really is the politics and economy of a colonial state. It was*

*cosy, very inward-looking and self-satisfied. They had accounted for their own off-spring. As Blacks we were at the University more or less like intruders, an unwanted presence. If the institution had been built with the idea of 6 million Blacks and about 300 000 Whites, naturally they would have thought of another alternative. But in this case, they saw Whites as the primary consideration (ZRR2).*

**Table 6B5: Students at UR Enjoyed the Prestige of Studying at the Prominent Institution and this Narrowed their Options only to this Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	6	(7.5)
Partially disagree	8	(10.0)
Neutral	15	(18.8)
Partially agree	35	(43.8)
Strongly agree	16	(20.0)
<b>Total</b>	<b>80</b>	

In response to whether students enjoyed the prestige of studying at UR or not, 63.8% agreed with the statement while 17.5% disagreed. Those who remained neutral on this issue constituted 18.8%. This outcome is supported by a former student, who revealed that,

*The University established its reputation through the quality of teaching. We used to learn a lot. In Science we did practicals. When you compared with Universities that were further north of us, that had been operating under independent governments, the quality was going down. Most of the students trekked down here to what looked like a premier University where things still worked (MMR2).*

**Table 6B6: Faculty at UR Enjoyed the Prestige of Working at the Prominent Institution and this Narrowed their Options only to this Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	9	(11.3)
Partially disagree	10	(12.5)
Neutral	24	(30.0)
Partially agree	26	(32.5)
Strongly agree	11	(13.8)
<b>Total</b>	<b>80</b>	

**Table 6B7: Administrators at UR Enjoyed the Prestige of Working at the Prominent Institution and this Narrowed their Options only to this Institution**

Responses	Percent Distribution	n(%)
Strongly disagree		4(5.0)
Partially disagree		13(16.3)
Neutral		28(35.0)
Partially agree		21(26.3)
Strongly agree		14(17.5)
<b>Total</b>		<b>80</b>

Table 6B6 above reveals that 46.3% of the respondents agreed that faculty enjoyed the prestige of working at UR while 23.8% disagreed with the statement. Table 6B7 above shows that 43.8% of the respondents agreed that administrators enjoyed the prestige of working at UR while 21.3% disagreed. A former administrator revealed that both faculty and administrators enjoyed the prestige of working at UR:

*Academics stayed for a long time at the University of Rhodesia because of relatively high salaries, provision of housing, contact and sabbatical leave to UK, working in the only non-racial 'island' in the country, academic freedom and institutional autonomy. For administrators there were relatively high salaries and provision of housing (ZRR2).*

### **Self-reinforcement**

**Table 6C1: Prospective Students Considered the UR the Preferred Institution among Others**

Responses	Percent Distribution	n(%)
Strongly disagree		5(6.3)
Partially disagree		7(8.8)
Neutral		15(18.8)
Partially agree		27(33.8)
Strongly agree		26(32.5)
<b>Total</b>		<b>80</b>

**Table 6C2: Other Institutions Failed to Develop in Competition with the UR Because the Latter had Established Itself as the Standard Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	12(15.0)	
Partially disagree	16(20.0)	
Neutral	11(13.8)	
Partially agree	22(27.5)	
Strongly agree	19(22.8)	
<b>Total</b>	<b>80</b>	

Table 6C1 above shows that 66.3% of the respondents agreed that students considered UR a prominent institution, while 50.3% of the respondents in Table 6C2 above agreed that other institutions failed to compete with UR. The latter statement received a modest endorsement because respondents did not have a basis for comparison. Interviewees pointed out that there was only one University in the country up to 1980, and so there was no institution to compare with the UR. In respect of the experiences of Black students, one current lecturer said, “*They [Black students] could go nowhere but come to this University because their chances of getting a scholarship for going abroad were nearly nil*” (BCR1).

However, that students considered UR a prominent institution was not in doubt, hence the emphatic endorsement of that idea (66.3%). In an interview, one former student said,

*We had a five star hotel residence. We had our own lounge. We had waiters and cleaners. We were being trained to be very elitist. Can you imagine we never cleaned our own rooms or made our own beds or cooked our own food. When we had dinner we had to have a high table in a rotational way. We had to wear gowns to dress up for dinner like they do at Oxford* (CFR2).

**Table 6C3: Students Derived Benefits from Their Association with UR**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	2(2.5)	
Neutral	7(8.8)	
Partially agree	42(52.5)	
Strongly agree	29(36.3)	
<b>Total</b>	<b>80</b>	

Table 6C3 above shows that 88.8% of respondents agreed with the statement that students derived benefits from associating with UR, while only 2.5% disagreed with the statement, with 8.8% of the respondents deciding to sit on the fence. Interviews with former students, administrators and faculty provided evidence that students felt that they derived benefits from associating with UR.

A former student revealed that,

*We were coming from the rural areas and for the first time we were able to get into a hall of residence where I could have a room of my own; people doing our beds, our rooms. For the first time we were able to go to a dining room where we had a choice of meals. For breakfast there was a whole array of food. Even facilities and learning resources were good. The library was very well stocked. Our lecture rooms were very good. We had a doctor on site. There were good sporting facilities, e.g. hockey, rugby, and soccer, etc. (CUR2).*

In concurrence with the above student, another revealed what students valued about UR:

*I must say in the early days the infrastructure at the University of Rhodesia was very good. The provisions were good. It was not overcrowded in the hostels. Students who came from far away did not have to look for alternative accommodation in town. There were enough rooms at the University. Nobody complained of being given dirty or torn linen. There was water and electricity every day. You could study throughout the night. There was no talk of dissatisfaction about the quality of food. That was a big attraction (KSR2).*

Besides the good living conditions, students benefitted from the UR's linkages with London and Birmingham Universities, and the high academic standards that were the hallmark of the institution.

**Table 6C4: Faculty Derived Benefits from their Association with UR**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	-	
Neutral	15(18.8)	
Partially agree	37(46.3)	
Strongly agree	28(35.0)	
<b>Total</b>	<b>80</b>	

**Table 6C5: Administrators Derived Benefits from their Association with UR**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	1(1.3)	
Neutral	21(26.3)	
Partially agree	38(47.5)	
Strongly agree	20(25.0)	
<b>Total</b>	<b>80</b>	

Table 6C4 and 6C5 above reveal whether faculty and administrators derived any benefits from associating with the UR. The results show that both faculty and administrators felt that they benefitted from their association with UR. Table 6C4 reveals that 81.3% of the respondents agreed that faculty benefitted from associating with UR, while in Table 6C5, 72.5% of the respondents felt that they derived benefits from associating with UR.

In an interview with a former academic, he said,

*For a long time it was small classes and opportunities to attend conferences within the country and outside. Research funds were available and there were fringe benefits of contact and sabbatical leave. Faculty benefitted from academic exposure and contacts abroad (BCR2).*

A former administrator concurred with the former academic:

*Academics stayed for a long time at the University of Rhodesia because of relatively high salaries, provision of housing, contact and sabbatical leave to UK, working in the only non-racial 'island' in the country, academic freedom and institutional autonomy. For administrators there were relatively high salaries*

and provision of housing (ZRR2).

**Table 6C6: Once Students Joined UR, it Became Difficult to Disengage from the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	14(17.5)	
Partially disagree	8(10.0)	
Neutral	20(25.0)	
Partially agree	25(31.3)	
Strongly agree	13(16.3)	
<b>Total</b>	<b>80</b>	

**Table 6C7: Once Faculty Joined UR, it Became Difficult to Disengage from the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	11(13.8)	
Partially disagree	9(11.3)	
Neutral	27(33.8)	
Partially agree	23(28.8)	
Strongly agree	10(12.5)	
<b>Total</b>	<b>80</b>	

**Table 6C8: Once Administrators Joined UR, it Became Difficult to Disengage from the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	12(15.0)	
Partially disagree	10(12.5)	
Neutral	27(33.8)	
Partially agree	24(30.0)	
Strongly agree	7(8.8)	
<b>Total</b>	<b>80</b>	

As shown in Table 6C6 above, 47.6% of the respondents agreed that students found it difficult to disengage from UR, while 41.3% of the respondents in Table 6C7 agreed that faculty found it difficult to disengage from UR. In Table 6C8 above, 38.8% of the respondents agreed that Administrators found it difficult to disengage from UR. The above are really measures of stickiness, that is, the extent to which stakeholders were satisfied with their involvement with UR that they decided to stick with the institution.

In interviews with stakeholders, it was revealed that faculty, students and

administrators found it difficult to disengage from the University because for students there were good living conditions, while for staff there were generous leave conditions, housing allowances and good salaries.

**Table 6C9: UR Capitalised on the Initial Advantage that it Enjoyed as the First Institution to be Established, to Continue Dominating the Market in Higher Education**

Responses	Percent Distribution	n(%)
Strongly disagree	2	(2.5)
Partially disagree	6	(7.5)
Neutral	6	(7.5)
Partially agree	28	(35.0)
Strongly agree	38	(47.5)
<b>Total</b>	<b>80</b>	

Table 6C9 above shows that 82.5% of respondents agreed that UR capitalised on the initial advantage to dominate the market. Ten per cent of the respondents disagreed, while 7.5% decided to remain neutral. These responses are an emphatic endorsement of the statement.

UR indeed capitalised on the advantage of being the first institution to be established in the country. One current lecturer said,

*The University of Rhodesia became prominent because it took off first. It is in a sense self-evident in that it was the only University. It did develop quite well despite the problems. It wasn't a failure as an institution. No-one could say that. Even the most bitter Rhodesian Front opponent couldn't say it was a failure. As the only University it was unchallenged (RRR1).*

Being the first and only University in the country meant that whatever support and assistance was provided went to the University. So it was in a privileged position. The provisions of the Royal Charter on which the University was founded, promoted multi-racialism, academic freedom and autonomy. There were small classes, good students and faculty, and an external reference system.



### **Positive Feedback**

**Table 6D1: Organisations, Institutions and Individuals Provided Positive Feedback to UR's Development, thus Further Entrenching it as the Institution of Choice in the Country**

<b>Responses</b>	<b>Percent Distribution</b>	<b>n(%)</b>
Strongly disagree	3(3.8)	
Partially disagree	6(7.5)	
Neutral	17(21.3)	
Partially agree	33(41.3)	
Strongly agree	21(26.3)	
<b>Total</b>	<b>80</b>	

Table 6D1 above shows that 67.6% of respondents agreed that organisations provided feedback to UR, while 11.3% disagreed, with 21.3% deciding to remain neutral. Svyantek and Brown (2000) define positive feedback as the supportiveness of an environment for a particular behaviour or outcome. Here, positive does not necessarily mean desirable or pleasing in the popular sense of the term. It refers to the amplification of individual (small) events that have causal significance. Given the racial polarisation during the period under study, the views of stakeholders were widely divergent. One former administrator summed up the feedback from the different stakeholders:

*Racist Whites hated the sense of equality of races the University conferred and vented their anger by accusing Black students of lowering standards in the institution, especially in the halls of residence. Liberal Whites welcomed this experiment on how the races could live together as equals. Blacks regarded the institution with a sense of awe, like a hallowed place which guaranteed all who passed through its portals a new life. The government of the day was divided along the lines of racist and liberal Whites. The media covered events at the institution almost religiously, denigrating the institution and Black students in the main. Commerce and industry were closely involved in the design of curricula and regarded UR as a source of high level manpower (ZRR2).*

External examiners also provided feedback on student academic performance and curricula. To that extent, the University was a microcosm of Rhodesian society, reflective of the wide and diverse spectrum of views and opinions.

Path dependency of institutions is all about complexity of popular action in which individuals make decisions and affect others in their preferences in a reciprocal fashion.

**Table 6D2: As More Students, Faculty and Administrators joined UR, this Helped to Improve its Reputation and Prominence as the Institution of Choice**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	3(3.8)	
Neutral	14(17.5)	
Partially agree	34(42.5)	
Strongly agree	29(36.3)	
<b>Total</b>	<b>80</b>	

As shown in Table 6D2 above, 78.8% of respondents agreed that UR's reputation improved as students, faculty and administrators joined the institution. Only 17.5% of the respondents decided to sit on the fence, while 21.3% disagreed with the statement. The responses are an endorsement of the statement.

Commenting on how the University improved its reputation, one former student said,

*The University established its reputation through the quality teaching. When you compared with Universities that were further north of us that had been operating under independent governments, the quality was going down. Most of the students trekked down here to what looked like a premier University where things still worked. Our association with British Universities had a major impact. Our degrees were University of London degrees (MMR2).*

**Table 6D3: Students, Faculty and Administrators Joined UR/UR Because it was the Institution with Which the Market was Familiar**

Responses	Percent Distribution	n(%)
Strongly disagree	1(1.3)	
Partially disagree	7(8.8)	
Neutral	7(8.8)	
Partially agree	41(51.3)	
Strongly agree	24(30.0)	
<b>Total</b>	<b>80</b>	

**Table 6D4: The Choice made by Students to join the UR was Influenced by the Fact that it was Fashionable to do so – it was Influenced by the Decisions of, and Pressures from, Other Students**

Responses	Percent Distribution	n(%)
Strongly disagree	11(13.8)	
Partially disagree	7(8.8)	
Neutral	22(27.5)	
Partially agree	28(35.0)	
Strongly agree	12(15.0)	
<b>Total</b>	<b>80</b>	

**Table 6D5: UR used its New Found Popularity to Further Entrench itself in the Domain of Higher Education**

Responses	Percent Distribution	n(%)
Strongly disagree	7(8.8)	
Partially disagree	5(6.3)	
Neutral	13(16.3)	
Partially agree	31(38.8)	
Strongly agree	24(30.0)	
<b>Total</b>	<b>80</b>	

The above three graphs show that in Table 6D3, 81.3% of respondents agreed that the market was familiar with UR, while 50% of respondents in Table 6D4 agreed that it was fashionable to join UR, with 68.8% of respondents in Table 6D5 agreeing that UR's popularity enhanced its dominance.

In interviews with former students, administrators and faculty, it was revealed that UR entrenched itself in the field of higher education by developing its infrastructure, for example, adding new Faculties and providing funds to carry out research. It also encouraged lecturers to visit secondary schools and recruit students. The University organised the Summer School and Open Days. The Rag Day [which was about charity] also provided another avenue for the University's publicity efforts, further helping to entrench the institution's position. Since there were few schools teaching 'A' level to Africans, the University tried to increase the intake of African students to University by having an 'A' level pre-University system for African students. These efforts were all part of the feedback that UR received from stakeholders and it helped the institution to entrench its position in the field of higher education.

**Lock-in****Table 6E1: UR became Prominent Because it took off First**

<b>Responses</b>	<b>Percent Distribution</b>	<b>n(%)</b>
Strongly disagree		2(2.5)
Partially disagree		4(5.0)
Neutral		6(7.5)
Partially agree		25(31.3)
Strongly agree		43(53.8)
<b>Total</b>		<b>80</b>

Table 6E1 above shows that 85.1% of respondents agreed that UR became prominent because it took off first, while 7.5% remained neutral, with an equal percentage disagreeing with the statement. The institution enjoyed first mover advantage and this helped to lock-in students, administrators and faculty to stick with the institution.

One former student revealed that, *“The University took off first but it took off well because you can have a first which will flop. It had many challenges but it survived those challenges” (KSR1)*. A current lecturer concurred with the former student: *“The University was the only such institution and it was not a failure as an institution. As the only University it was unchallenged, so naturally it was prominent” (RRR1)*.

The University was in a monopoly position. As the only institution, whatever support and assistance came from within the country and outside was channeled towards the University. That boosted its standing. It was in a privileged position. As the movement to South African Universities diminished, and as the University became entrenched as an expanding establishment, it became prominent. It also had to do with standards. Although the University enjoyed first mover advantage, if its standards were low, people would have shrugged their shoulders and ignored it. Those who ran the University did their best to make it successful and this success helped to lock-in stakeholders to stick with the institution.

**Table 6E2: Over the Years Students, Faculty and Administrators Developed a Deep Attachment to UR thus Ensuring that they Stuck with the Institution**

Responses	Percent Distribution	n(%)
Strongly disagree	4	(5.0)
Partially disagree	6	(7.5)
Neutral	16	(20.0)
Partially agree	36	(45.0)
Strongly agree	18	(22.5)
<b>Total</b>	<b>80</b>	

**Table 6E3: Once Students, Faculty and Administrators joined UR, they Became Uninterested in Joining other Institutions of Higher Learning**

Responses	Percent Distribution	n(%)
Strongly disagree	10	(12.5)
Partially disagree	17	(21.3)
Neutral	20	(25.0)
Partially agree	25	(31.3)
Strongly agree	8	(10.0)
<b>Total</b>	<b>80</b>	

**Table 6E4: The Rise to Prominence of the UR was Because its Presence Helped to Reduce Uncertainty Regarding the Provision of Higher Education**

Responses	Percent Distribution	n(%)
Strongly disagree	-	
Partially disagree	4	(5.0)
Neutral	11	(13.8)
Partially agree	42	(52.5)
Strongly agree	23	(28.8)
<b>Total</b>	<b>80</b>	

**Table 6E5: If Another Institution of Higher Education were to be Introduced before 1980, it Would not have Taken Off**

Responses	Percent Distribution	n(%)
Strongly disagree	22	(27.5)
Partially disagree	13	(16.3)
Neutral	17	(21.3)
Partially agree	15	(18.8)
Strongly agree	13	(16.3)
<b>Total</b>	<b>80</b>	

The four tables shown above reveal that 67.5% of respondents in Table 6E2

agreed that faculty, administrators and students developed an attachment to UR, while 41.3% of respondents in Table 6E3 agreed that students, administrators and faculty were uninterested in joining other institutions. Most respondents knew that the UR was the only institution of higher education, so they had difficulties identifying other institutions of similar standing in the country with which to compare. Hence there was skepticism (25%) among respondents and a moderate level of disagreement (33.8%) with the statement as shown in Table 6E3 above.

Table 6E4 above shows that 81.3% of respondents agreed that UR's prominence helped to reduce uncertainty, while 35.1% of respondents in Table 6E5 agreed that if other institutions of higher education were to be introduced before 1980, they would not have taken off.

Students, faculty and administrators became locked-in because of the low fees, good living conditions, high educational standards, and good conditions of service [for faculty and administrators]. The University had much promise and it delivered magnificently. The 'A' level entry requirement was a major decision that was taken in the early days, to make UR degrees comparable to the UK. It gave the University status and encouraged lock-in. Faculty stayed partly because of this dream of a national multi-racial institution. For others, they stayed because their profession was not one that travelled well. In any case, to end up being in a University somewhere else would have diminished their influence.

### **Conclusion**

From the above frequencies and supporting evidence from interviews, it is clear that the UR was viewed by respondents as a successful and prominent institution of higher learning. The evidence in this chapter also established that the evolution of UR exhibited characteristics of path dependency, i.e., initial conditions, increasing returns, self-reinforcement, positive feedbacks, and lock-in. The next chapter discusses the contribution and limitations of the study and suggests areas for future research.

## **CHAPTER 7: DISCUSSION, CONTRIBUTION, LIMITATIONS AND AREAS FOR FURTHER RESEARCH**

### **Introduction**

The purpose of this chapter is to discuss the results of the study and their implications for theory and management practice. It reveals the limitations of the study and suggests areas for future research. The findings of the study are analysed within the context of the current academic literature on RBV and path dependency.

This study examined the evolution of the University of Rhodesia and established that its evolution was path dependent. It identified the enduring characteristics of UR which reflect a path dependent organisation. The findings revealed patterns and dynamics of path dependency which serve as a source of competitive advantage in organisations.

Below the researcher summarises the key objectives of the study.

1. To provide definitional clarity and raise the level of analytic precision of the concept of RBV and path dependency, by explicating their origins, insights and current status.
2. To refine and solidify the concepts of RBV and path dependency in order to validate their main prescriptions so as to allow their application in organisations.
3. To empirically explore path dependency as a source of competitive advantage.
4. To analyse the University of Rhodesia's historical development and strategic responses as a case study in order to establish enduring characteristics of an organisation that are a source of competitive advantage.
5. To adapt the concept of path dependency to the study of business management so that managers may be able to understand why conditions of emergence, like initial conditions, self-reinforcement, increasing returns, positive feedbacks and lock-in, can be a source of competitive advantage.

Broadly, the key objectives of the study were to define and trace the origins of path dependency, to empirically verify its prevalence with respect to the evolution of UR, and to show its contribution to management theory and practice. Below the researcher assesses the extent to which these objectives were fulfilled.

### **Definition and Status of Path Dependency**

One of the key research objectives of the study was to provide definitional clarity on the concept of path dependency by explicating its origins, insights and current status. This was in response to Zukowski's (2004) concern that the term 'path dependency' has not yet a commonly accepted precise definition. This answer was provided in Chapter 3 under the review of literature. The literature review provided a history of the industrial organisation economics perspective of strategy which has now been overtaken by a new perspective called the resource based view (RBV) of the firm. The researcher discussed the concept of the resource-based view and articulated its characteristics in order to establish the foundation for a definition of path dependency.

Several authors (David, 1985; Mahoney, 2000; Page, 2006; Kay, 2003) define path dependency from a number of perspectives. David (1985) defines path dependency in terms of past events that influence future events. Mahoney (2000) argues that the term means what happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time. Page (2006, p. 88) argues that path dependency conveys the idea that "current and future states, actions and decisions depend on the path of previous states, actions, or decisions". Kay (2003) suggests that a system is path dependent if initial moves in one direction elicit further moves in that same direction.

According to Teece, Pisano and Shuen (1997), path dependency recognises that 'history matters'. Page (2006) argues that literature on path dependency reveal four related causes, that is, increasing returns, self-reinforcement, positive feedbacks and lock-in. This study consolidated the definition of path



dependency by including the characteristic of initial conditions. The researcher further explored the concept of chaos theory which is associated with initial conditions, thus bringing clarity to the concept of path dependency. The researcher then articulated diagrammatically (Chapter 3) the concept of path dependency into a framework. The five substantive categories which determine path dependency (initial conditions, increasing returns, self-reinforcement, positive feedbacks, and lock-in) emerged from the review of literature. These were used to categorise qualitative data during the coding process. To this end, the key objective of clarifying, refining and solidifying the concept of path dependency was achieved.

### **Empirical Evidence**

Another key objective was to empirically explore path dependency as a source of competitive advantage. Studies (Hermann, 2005; Fahy 2000; Miller & Shamsie, 1996) criticise the RBV concept as being under-theorised and under-served empirically. Fahy (2000) and Hermann (2005) argue that contributions within the RBV have been of a conceptual rather than empirical nature, and that many of the fundamental tenets still remain to be validated in the field. Miller and Shamsie (1996, p. 521) suggest that, “There is need for more systematic empirical studies to examine the conceptual claims of the resource-based scholars”. This study is a response to the call for empirically testing the concept of path dependency by examining the evolution of UR between 1945 and 1980, in order to reveal the institution’s sources of competitive advantage.

### **Initial Conditions**

Sensitivity to initial conditions reflects how things were at the time of the founding of the organisation. One of the founding conditions of UR was the formation of the **Federation** of Southern Rhodesia, Northern Rhodesia and Nyasaland in 1953. The British Government wanted the Federation to succeed and so it helped the University succeed.

One participant commented thus: “*The University College of Rhodesia and Nyasaland was a child of the Federation*” (BCR2).

A former student was more elaborate:

*I think that the founding of the Federation of Rhodesia and Nyasaland may have influenced the founding of the University. Students, after their secondary school in the three territories, used to go to South Africa. I think very few went overseas. With the formation of the Federation it was considered that an educational institution was necessary in the country (SCR2).*

The above evidence is consistent with Dopfer's (1991) definition of an initial condition as constituting some sort of seed that grows by the self-generating dynamics of the process. In this regard, we see evidence of how the UR "did not emerge accidentally" (Schwart, 2004, p. 7). The Federation acted as an attractor (Arrigo & Barret, 2008), because it exerted a magnetic appeal to the idea of a University. One participant said in this regard, "*I think there was a lot of positive vibes going on about the Federation and that spilled over to the University*" (BRR2).

As an initial condition, the Federation was a source of competitive advantage for UR because there was goodwill on the part of Government and society in general to see the idea of the Federation succeed. The Federation was inextricably linked to that of a multi-racial University and so there was positive foundational support for the UR to succeed.

The **Unilateral Declaration of Independence** (UDI) emerged as one of the founding conditions that influenced the development of UR. With the introduction of UDI in 1965, "*We started to have real problems*" (BRR1). Another participant was more explicit: "*On the whole, UDI was basically a negative influence. It slowed down the development of the University quite significantly*" (BCR2).

In a discussion of chaotic systems as part of initial conditions, Rosenhead (1998, p. 3) notes that "a small disturbance leads to a movement away from the starting point, which in turn generates further divergence". While UDI was

not a small disturbance, it caused UR to change course in its evolution. Thus UDI, a seemingly chaotic event, created a paradigm shift in path dependence. UDI was a 'critical juncture' (Mahoney, 2000) which dramatically altered the course of history in the development of UR. It became difficult to return to the initial point when the alternative idea of the Federation was still available.

With the introduction of UDI, UR was seen as an exclusive club where only bright [Black] students and White students could be enrolled. This gave UR an elitist and exclusive status. These characteristics reinforced UR as a successful ivory tower institution even after independence in 1980. This elitism and exclusivity, which was associated with high standards, enhanced UR's competitive advantage.

A former student had this to say,

*Sir Humphrey Gibbs was the Governor and we used to go to Government House as students. As students we didn't know that we were so privileged. We were really an elite. I remember a group of Oxford students coming and saying, 'My God, you people are having servants. How much are the cleaners and the waiters paid?' They were paid about £10. They said, 'You people are part of the exploitative system'. It is only when I was in England that I realised that we were really being treated like an elite. We were really trained to join the White elite (CFR2).*

**Rhodesian nationalism** also provided the impetus for the establishment of UR and is therefore one of the initial conditions. Rhodesians wanted an institution which was "...distinct from the South African tradition which by 1948 was going for separate development, separate institutions and facilities" (ZRR2).

In that regard, a former lecturer had this to say,

*I think we have to remember that in 1923, Rhodesia almost became a sixth province of South Africa. But the Whites in Rhodesia said, "No, we have to be a distinct Rhodesian nation" (ZRR2).*

Rhodesians built a University that was unique and peculiar to the Rhodesian situation, different from South African Universities. This uniqueness gave the UR competitive advantage because Rhodesian students now attended University at UR rather than go to South African Universities. This allowed UR to compete at a regional level. Barney (1991, p. 102) said in this regard, "A firm has SCA when it is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors."

The **British influence** also constitutes an initial condition in the establishment of UR. The British Government had a policy to set up University Colleges across the continent. This finding is consistent with Teece, Pisano and Shuens' (1997, p. 522) observation that, "...the current position of a firm is often shaped by the path it has travelled ... we cannot understand today's choices without tracing their evolution through time".

The British influence was a source of competitive advantage for UR because UR benefitted from the advice, teaching materials, administrative practices, and financial assistance that were provided by Britain. UR did not have to 'reinvent the wheel' because it benefitted from the tradition of scholarship provided by an established colonial system. One participant elaborated on the benefit to UR of the British influence:

*The fact that both the administration of the University and its whole academic structure were modelled and determined in the British way, had the advantage that the British academic system is a very strong one and one which the quality of higher education is outstanding (BCR1).*

The British influence brought benefits to UR. It resembles Liebowitz and Margolis' (1995) first degree path dependency, where sensitivity to initial conditions exist, but have no implied inefficiency.

**Federation**, as an initial condition, was inextricably linked to the issue of **multi-racialism**. Since the Federation was an experiment at multi-racialism, the University had to be multi-racial in outlook. The experiment of bringing students from different races to learn together had a positive side to it. It helped attract academics and students alike because this was a unique development. It was a source of competitive advantage because Rhodesia was building a unique multi-racial institution while neighbouring South Africa was going for separate development. Diversity as reflected in the policy of multi-racialism, enhanced UR's competitive advantage.

One participant had this to say, "...the fact that it was a distinctly multi-racial University was probably a very attractive pulling card" (SJR1).

### **Increasing Returns**

Pierson (2000) suggests that increasing returns dynamics pinpoint how the costs of switching from one alternative to another will increase over time. UR was the first and only institution to be established in Rhodesia during the period under study (1945 to 1980). The institution enjoyed first mover advantage and a monopoly position in the country. There was no pressure to introduce another University because UR catered for the needs of a small White minority population. As the only institution of higher education in the country during the period under study, this monopoly position gave it competitive advantage.

In an interview, a former lecturer said,

*The University was originally designed to cater for the White population. The White population was not very big either. The pressure to start other institutions was never there because when they looked at the population, they saw more of the White needs and not those of Blacks (RRR2).*

Another factor that led to increasing returns was the **linkage** between UR and the Universities of London and Birmingham. UR enjoyed a number of benefits as a result of this relationship. This linkage meant that the UR was able to

offer an internationally recognised qualification. It also meant that UR was able to benefit by having ready access to experience, structures and ways of designing degree programmes. The in-built system of external examiners helped to guarantee standards for UR.

The linkage with London and Birmingham was a source of competitive advantage because UR was able to attract capable staff as a result of this association. As Dyer and Singh (1998, p. 676) suggest, "... collaborating firms can generate relational rents through relation-specific assets, knowledge-sharing routines, complementary resource endowments, and 'effective governance'".

The ability to attract **eminent academics** was a big factor on the side of the University. The eminent staff boosted the institution's reputation and this was a major attraction for students and lecturers. Pierson (2000, p. 455) argues that, "...increasing returns are evident when established firms attract suppliers, skilled labour... and appropriate physical infrastructure".

Another factor that brought about increasing returns was the **high standards** at UR which were a source of competitive advantage. The enrolment process which admitted only the very best 'A' level students was meant to guarantee standards at the University and boost the reputation of the institution. The use of external examiners and the attraction of eminent academics ensured that standards at UR remained high over time. Dierickx and Cool (1989, p. 1506) posit that, "...how inimitable an asset is ... is the cumulative result of adhering to a set of consistent policies over a period of time..." High standards enabled the UR to attract both high quality lecturers and students, thus securing a competitive advantage.

### **Self-reinforcement**

According to Page (2006, p. 88), self-reinforcement means that, "making a choice or taking an action puts in place a set of forces or complementary institutions that encourage that choice to be sustained". The results of this study show that a well **developed curriculum** was one such force that

encouraged the UR to be sustained as a successful institution of higher education in Rhodesia. One participant said, *“We used some of the University of London syllabus and books. That was a big advantage”* (CGR1).

A well developed **infrastructure** helped to attract students and lecturers and contributed to the reinforcement of UR as a prominent institution. One participant commented thus: *“There was a library that by any standard was good in those days. There were very good facilities. There were excellent sporting facilities”* (BRR1). Balman, Odeng, Weikard and Brandels (1996) argue that as more people use a facility, this encourages investments in the linked infrastructure which in turn attracts still more users. A well developed infrastructure supported the position of UR as a successful organisation.

Small **class sizes** also helped to reinforce the image of the UR as an institution with high standards and one with an elitist outlook. One participant said that the small numbers of students, *“...created a very friendly atmosphere, an atmosphere conducive to teaching”* (DDR1). Mahoney (2000) suggests that where there are self-reinforcing properties, initial steps in a particular direction induce further movement in the same direction, such that over time, it becomes difficult to reverse direction. One participant supported this outcome: *“It was only in the 1980s that we started to build 400-seater lecture theatres”* (BRR1).

**Publicity efforts** also contributed to the reinforcement of the UR as a successful organisation. There were open days, summer schools, visits to secondary schools and the Rag Day. One current lecturer commented:

*We developed a Summer School so the public could come in and listen to lectures on something topical, not really academic, but nevertheless serious, with some intellectual content. They were very popular. We organised an Open Day once a year where various exhibits were made in scientific departments, which showed experiments and they were incredibly popular. The attendance was in the thousands* (RRR1).

**Grants and scholarships** helped to reinforce the UR as a prominent institution because they helped Black students attend University. Other factors that helped to sustain the UR as a successful organisation were its reputation and the fact that it was considered a major contributor to the development of the economy and society.

### **Positive Feedback**

Svyantek and Brown (2000, p. 71) define positive feedback as “the supportiveness of the external environment for a particular outcome”. Positive feedback was evident in the response to the high standards at UR to the extent that even when alternative institutions were eventually available within the Federation, students from other countries still chose to enrol at UR.

*Even when Zambia and Malawi started their own Universities, they were second rate relative to this one, so a lot of Zambians and Malawians would rather have come here... (HAR1).*

So outstanding and noticeable was the University that it drew a lot of attention from government and society in general. A former administrator revealed that,

*I can remember many times playing hockey for the University team and we would go to various sports clubs around Salisbury [now Harare]. People would call us ‘the Kremlin on the Hill’. Government looked at us with a degree of uh... what are you doing? What are you talking about? What are you whispering about?” (BRR1).*

UR was dubbed by other names, which reflected a high regard for the institution: “*The University of Rhodesia was known as the Cambridge of Africa*” (LRR1).

This positive feedback was a source of competitive advantage.



### Lock-in

According to Page (2006), lock in is a hard-to-escape situation. Staff experienced lock-in because UR had very good conditions of service which included housing allowances, sabbatical and contact leave. Pierson (2000) argues that, institutions provide incentives that encourage individuals to act in ways that lock them in.

Staff at the UR were locked-in to the institution because of lack of alternative institutions of higher education. One former lecturer's comments exemplify this lack of alternatives: *"For us it was either you stayed at this University or you left the country. If you wanted to be at a University, this was the only University in Rhodesia"* (HAR2).

Staff lock-in also occurred at the University because of the availability of funds and opportunities for research. One participant said, *"Whatever research you wanted to do during those years, you got money because there was a lot of it"* (CGR1). Lecturers were also motivated to stay at the University because there were opportunities to research in a new environment: *"Lecturers had the opportunity to pursue research interests in virgin territory"* (PFR1).

Lecturers also exhibited behavioural lock-in to the extent that, *"...the influence that you could have [at UR] was phenomenal. You would be consulted about issues..."* (SJR1). The lock-in exhibited by lecturers was a reflection of professionals who wanted to remain in their comfort zones. Professionals tend to resist attempts to change the *status quo*. The results of the study are consistent with Barnes, Gartland and Stacks' (2004, p. 373) explanation of lock-in: *"...once a particular behaviour is embedded in organisations, a strong status quo inertia may discourage other behaviour. It takes tremendous effort to change, and individuals may simply be uninterested"*.

Students also experienced lock-in due primarily to high educational standards and good living conditions. One former student said, *"We had good facilities, good resources, and good lecturers"* (CUR2). Another concurred: *"When I*

*was there at the University in 1973, the facilities were excellent; from hostels to classrooms. It was really an elitist establishment” (ZRR2).*

The living conditions were supposed to emulate those of Oxford and Cambridge Universities.

*We had only one University because they were training us to be like Oxford and Cambridge. We were the elite. We had a five-star hotel residence. We had to wear gowns to dress up for dinner like they do at Oxford (FCR2).*

### **Contribution of the Study**

There has been some controversy regarding the performance of a literature review at the onset in grounded theory studies (Chen & Boore, 2009). The two main proponents of the grounded theory, Glaser and Strauss (1967), diverged significantly on their beliefs about how its principles and methods should be interpreted and deployed. Strauss, in his later writing with Corbin (Strauss & Corbin, 1990) advanced a ‘different’ version of grounded theory, which they considered to be the result of maturation of the classical approach (Chen & Boore, 2009). They advocated reviewing the literature early in the study for several reasons:

- ◆ It stimulates theoretical sensitivity.
- ◆ It provides a secondary source of data.
- ◆ It stimulates questions.
- ◆ It directs theoretical sampling.
- ◆ It provides supplementary validity.
- ◆ It can identify the current gaps in knowledge (Strauss & Corbin, 1990).

Further, as grounded theory studies often take a new perspective on an old issue, it is important to be familiar with previous knowledge so as to outline the research phenomenon (McGhee *et al.*, 2007), clarify concepts, and define terms (Cutcliffe, 2000). McGhee, Marland, and Atkinson (2007) argue that it is undesirable that a researcher enters the field in an ‘atheoretical’ state and rather should be aware of extant knowledge. In support of reviewing literature

in grounded theory, Walls, Parahoo and Fleming (2010) suggest that the researcher requires some knowledge of the subject to provide orientation and direction. McCallin (2003) argues that reading literature has a place in modern-day grounded theory studies because previous knowledge becomes data to be integrated into a study, using constant comparative analysis in order to refine emerging concepts and categories.

This study used the 'modified', or 'modern interpretation', of grounded theory as a research study. This study reviewed literature at the beginning of the research and developed a theoretical framework in order to reduce the uncertainty regarding the context and the focus of the topic. Examples of studies that have used this approach include April (1994), who uses a multiple case approach for unearthing specific insights in the South African personal financial services firm, and Shockley (2003), who first reviews literature on education, information technology and the economics of change, before coming up with a 'model for internet embedded use among teachers' in California, England and Singapore.

Based on the review of literature, the researcher realised that there was a missing link in the framework of path dependency. The research made an improvement on the existing framework by incorporating 'initial conditions' as a major determinant of the emergence of organisations. Both the literature review and empirical data confirmed the influence of other elements of path dependency, i.e., increasing returns, self-reinforcement, positive feedback and lock-in. The expanded framework added initial conditions as a major factor that shapes and directs the path and trajectory in the evolution of organisations. This study has also caused the researcher to improve on the initial framework that emerged from the critical exploration of the literature.

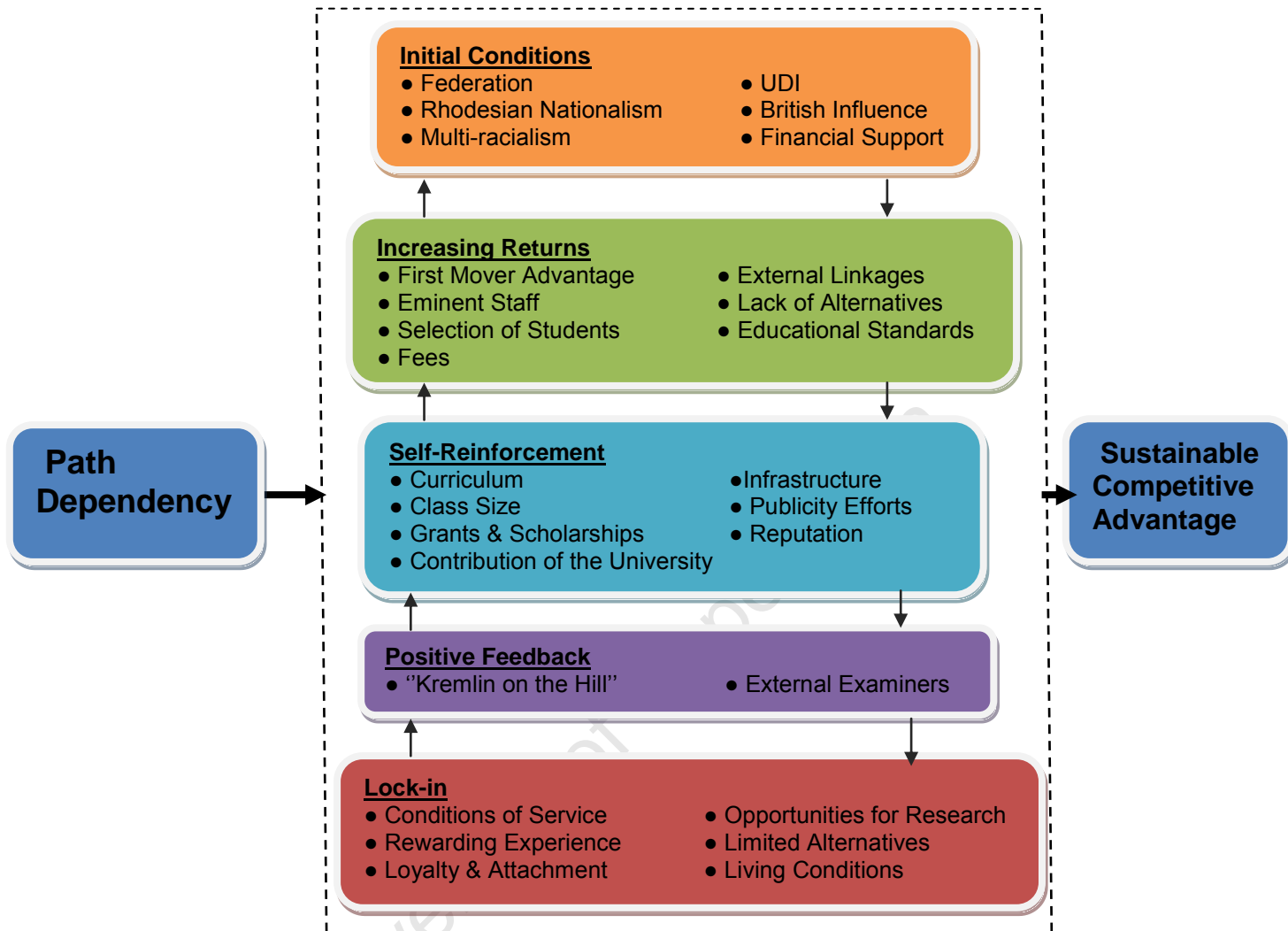
Thus, an important contribution of this study was the development of an expanded conceptual framework (see Figure 7.1 below) which emerged from an empirical application of the concepts of RBV and path dependency. The framework reveals the enduring patterns and dynamics of path dependent organisations. This conceptual framework, as revealed by the UR case study,

articulates the enduring difficult-to-imitate founding conditions which can be sources of competitive advantage. The tool can be used to analyse the development of organisations, especially the dynamic influence and patterns of initial conditions, increasing returns, self-reinforcement, positive feedbacks, and lock-in in path dependency which are highlighted in the case study.

This study sensitises researchers to new areas of research on the evolution of organisations. The conceptual framework can also be used to teach determinants and patterns of path dependency in strategic management.

The conceptual framework is an important contribution to the field of strategic management which reflects how institutions emerge in complex environments. Levy (1994) argues that one of the enduring problems facing the field of strategic management is the lack of theoretical tools available to describe and predict the behaviour of firms and industries. The conceptual framework (Figure 7.1 below) is a partial answer to that call.

**Figure 7.1: A Framework for Determining Path Dependency in the Evolution of the University of Rhodesia, 1945-1980**



Source: Author

This study clarified the definition of path dependency by including initial conditions, as one of the determinants of path dependency. The researcher further explored the concept of chaos theory, which is associated with the characteristic of initial conditions, thus bringing further clarity to the concept of path dependency.

The study provided empirical evidence that the evolution of UR was path dependent. By understanding the sources of competitive advantage of institutions as revealed in the UR case study, the study was able to explain why UR was a successful organisation. The study informs us about the

enduring characteristics and patterns (see Figure 7.1 above) that continue to define competitive advantage in organisations.

### **Implications for Management**

The contribution of this study is not limited to strategy in business management, but to the broad area of strategy in organisational analysis as exemplified in the UR case study.

This study will help managers improve their understanding of founding conditions and patterns as highlighted by the UR case study. Further, the study will help managers understand that the particular sequencing of events or processes play a key part in explaining divergent outcomes (Pierson, 2000).

Contrary to the principle of decreasing marginal returns (Pierson, 2000), where economic actions engender negative feedback, this study presented the concept of increasing returns, which reflects how the more an action is taken, with positive feedbacks, the greater are its benefits. This study makes the revision and generation of theory a legitimate enterprise.

### **Limitations of the Study**

The conceptual framework provides a useful template for assessing sources of sustainable competitive advantage from a path dependency perspective in institutions of higher education in an emerging economy. This study is based on a case study and therefore has limited generalisability. It might not be applicable to similar organisations in different environments.

Another limitation is that the data sampled in this study was drawn only from former students, current and former administrators and academics. This could have introduced some bias. Respondents drawn from a different sample could come up with different themes. Also, some of the core categories that emerged might have simply explained generic factors that determine institutional success. However, the study unpacked the sources of competitive advantage of an institution in an emerging economy.

**Further Research**

Researchers who are interested in the verification of research can use this conceptual framework to assess the durability or resilience of the founding conditions and patterns in shaping the University of Zimbabwe post-1980 to date, to ascertain whether its development was path dependent. This will help us understand how the founding conditions and patterns play out in a post-colonial situation.

Future research can also use the proposed framework in other contexts in order to verify its empirical relevance.

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**BIBLIOGRAPHY**

- Aaker, D. A., Kumar, V., & Day, G. S. (1998). *Marketing research, 6th edition*. New York: John Wiley & Sons Inc.
- Abbott, A., Button, C., Pepping, G. J., & Collins, D. (2005). Unnatural selection: Talent identification and development in sport. *Nonlinear Dynamics, Psychology and Life Sciences*, 9(1), 61-88.
- Adams, J., Khan, H. T. A., Raeside, R., & White, D. (2007). *Research methods for graduate business and social science students*. London: Sage Publications Ltd.
- Adler, P. (2002). Market, hierarchy, and trust: The knowledge economy and the future of capitalism. In Choo C. W. & Bontis, N. (Eds.), *The strategic management of intellectual capital and organizational knowledge*. Oxford: Oxford University Press, Ltd.
- Adler, P. S. & Kwon, S. (2002, Jan.). Social capital: Prospects for a new concept. *The Academy of Management Review*, 27(1), 17-40.
- Amit, R. & Schoemaker, P. J. H. (1993). Strategic assets and organisational rent. *Strategic Management Journal*, 14(1), 33-46.
- Andrews, K. R. (1971). *The concept of corporate strategy*. Richard D. Irwin.
- Ansoff, H. I. (1987). *Corporate strategy*. Penguin Books.
- April, K. (2002). Guidelines for developing a k-strategy. *Journal of Knowledge Management*, 6(5), 445-456.
- April, K. A. (2004). A resource-based view of the firm: Integrating the role of IT as a strategic resource – An empirical study of South African personal financial services (assurance) firms, 1999-2003. PhD Thesis, Graduate School of Business, University of Cape Town.
- April, K. & Cradock, J. (2000). *E or b e@ten: E-business redefining the corporate landscape in South Africa*. Durban: Butterworths Publishers.
- April, K. & Shockley, M. (2005). Social complexity – An integrating catalyst for complementary resource combinations in the South African Assurance Industry. 4<sup>th</sup> International Critical Management Studies Conference, Judge Institute of Management, Cambridge, UK.



- April, K., Macdonald, R. & Vriesendorp, S. (2000). *Rethinking leadership*. Kenwyn: University of Cape Town Press.
- April, K., Shockley, M. & Peters, K. (2009). IT and social complexity – complementary resource combinations in the South African assurance industry. *Problems and Perspectives in Management*, 7(1), 86-98.
- Ajlounii, M. M. (2010). The main features of the structure-conduct-performance (SCP) literature in banking during the period 1960s-1980s. *International Journal of Economic Perspectives*, 4(3), 509-523.
- Antonelli, C. (1997). The economics of path-dependence in industrial organization. *International Journal of Industrial Organization*, 15, 643-675.
- Arrigo, B. A. & Barrett, L. (2008). Philosophical criminology and complex systems science: Towards a critical theory of justice. *Critical Criminology*, 16, 165-184.
- Arthur, W. B. (1989). Competing technologies and lock-in by historical events. *Economic Journal*, 99(394), 116-131.
- Arthur, W. B. (1994). Positive feedbacks in the economy. *The McKinsey Quarterly*, 1, 81-95. (Reprinted from *Scientific American*).
- Ashmos, D. P., Duchon, D. & McDaniel Jr, R. R. (2000). Organizational responses to complexity: The effect on organizational performance. *Journal of Organizational Change Management*, 13(6), 577-594.
- Asquith Justice A. C. (Chairman) (1943), Report of the Commission on Higher Education in the Colonies, National Archives of Zimbabwe, Cmd 6647.
- Atkinson, N. D. (1972). *Teaching Rhodesians: A history of educational policy in Rhodesia*. London: Longman.
- Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review*, 14(4), 496-515.
- Balman, A., Odeng, M., Weikard, H., & Brandes, W. (1996). Path-dependence without increasing returns to scale and network

- externalities. *Journal of Economic Behaviour and Organization*, 29, 159-172.
- Barnes, W., Gartland, M. & Stack, M. (2004, June). Old habits die hard: Path dependency and behavioural lock-in. *Journal of Economic Issues*, XXXVIII(2), 371-377.
- Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32(10), 1231-1241.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Barney, J. B. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, 9(4), 49-61.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27, 643-650.
- Barney, J. B. & Zajac, E. J. (1994). Competitive organizational behaviour: Towards an organizationally-based theory of competitive advantage. *Strategic Management Journal*, 5, 9.
- Bebasat, I., Goldsten, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, 11, 369-386.
- Bebchuk, L. A. & Roe, M. (1999, November). A theory of path dependence in corporate ownership and governance. *Stanford Law Review*, 52(1), 127-170.
- Beinhocker, E. (1997). Strategy at the edge of chaos. *The McKinsey Quarterly*, 1.
- Bennett, A. & Elman, C. (2006). Complex causal relations and case study methods: The example of path dependence. *Political Analysis*, 14, 250-267.
- Birley Robert (1966, April). Report of the Commission of Enquiry. University College of Rhodesia.

- Bitar, J., & Hafsi, T. (2007). Strategizing through the capability lens: Sources and outcomes of integration. *Management Decision*, 45(3), 403-419.
- Black, J. A. & Boal, K. B. (1994). Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, 15, 131-148.
- Bloch, Deborah, P. (2005, March). Complexity, chaos, and non-linear dynamics: A new perspective on career development theory. *The Career Development Quarterly*, 53, 194-207.
- Blumer, H. (1969). *Symbolic interaction*. Englewood Cliff, NJ: Prentice Hall.
- Boas, T. C. (2007). Conceptualizing continuity and change: The composite-standard model of path dependence. *Journal of Theoretical Politics*, 19(1), 33-54.
- Bohm, D. (1980). *Wholeness and the implicate order*. London: Routledge.
- Booth, C. (2003). Does history matter in strategy? The possibilities and problems of counterfactual analysis. *Management Decision*, 41(1), 96-104.
- Bowman, C. & Ambrosini, V. (2003). How the resource-based and dynamic capability views of the firm inform corporate-level strategy. *British Journal of Management*, 14, 298-303.
- Brace, I. (2004). *Questionnaire design: How to plan, structure and write survey material for effective market research*. London: Kogan Page Ltd.
- Bridges, A. (2000, Spring). Path dependence, sequence, history, theory. *Studies in American Political Development*, 14, 109-112.
- Burnes, B. (2005). Complexity theories and organizational change. *International Journal of Management Review*, 7(2), 73-90.
- Burns, T. & Stalker, G. M. (1961). *The management of innovation*. London: Tavistock Publications.

- Cameron, K. (1978, December). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly*, 23(4), 604-632.
- Cameron, K. (1981, March). Domains of organizational effectiveness in colleges and universities. *Academy of Management Journal*, 24(1), 25-47.
- Cameron, K. (1986, January). A study of organizational effectiveness and its predictors. *Management Science*, 32(1), 87-112.
- Carr-Saunders (Chairman) (1953). Report of the Commission on Higher Education for Africans, Salisbury, Central African Council.
- Carter, S. M. & Ruefli, T. W. (2006). Intra-industry reputation dynamics under a resource-based framework: Assessing the durability factor. *Corporate Reputation Review*, 9(1), 3-25.
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. Australia: John Wiley & Sons.
- Chadwick Elizabeth (1946, 5 November). A Rhodesian University: Legislative Assembly empowers a Board of Trustees, Unpublished.
- Chamberlin, E. H. (1933). *The theory of monopolistic competition: A reorientation of the theory of value*. New York: Wiley.
- Chandler, A. D. (1962). *Strategy and structure*. Massachusetts: MIT Press.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publications Ltd.
- Chen, H. Y. & Boore, J. R. P. (2009). Using a synthesised technique for grounded theory in nursing research. *Journal of Clinical Nursing*, 18, 2251-2260.
- Chideya, N. T. & Sibanda, M. J. M. (1979, 21 December). A campus decolonized? The urgent question of succession at the University of Rhodesia. *Times Higher Education Supplement*.
- Choi, C. J., Millar, C. C. J. M., Chu, R. T., & Berger, R. (2007). Increasing returns and marketing strategy in the twenty-first century: Nokia versus

- Microsoft versus Linux. *Journal of Business & Industrial Marketing*, 22(5), 295-301.
- Cilliers, P. (2006). Complexity and philosophy: On the importance of certain slowness. *E:CO*, 8(3), 105-112.
- Cockburn, I. M, Henderson, R. M., & Stern, S. (2000). Untangling the origins of competitive advantage. *Strategic Management Journal*, 21, 1123-1145.
- Collis, D. J. & Montgomery, C. A. (1995). Competing on resources: Strategy in the 1990s. *Harvard Business Review*, 73, 118-128.
- Collis, D. J. & Montgomery, C. A. (1997). *Corporate strategy: Resources and the scope of the firm*. Irwin: McGraw-Hill Companies, Inc.
- Combs, J. G. & Ketchen Jr, D. J. (1999). Explaining inter-firm cooperation and performance: Toward a reconciliation of predictions from the resource-based view and organizational economics. *Strategic Management Journal*, 20, 867-888.
- Cooper, D. R. & Schindler, D. A. (2001). *Business research methods*, 7<sup>th</sup> edition. London: McGrawhill Companies, Inc.
- Cowan, R. (1990). Nuclear power reactors: A study in technological lock-in. *Journal of Economic History*, 50, 541-567.
- Cowan, R. (1991, July). Tortoises and hares: Choice among technologies of unknown merit. *The Economic Journal*, 101, 801-814.
- Cox, R. (2004, April). The path dependency of an idea: Why Scandinavian welfare states remain distinct. *Social Policy & Administration*, 38(2), 204-219.
- Coyne, K. P. (1986, Jan.-Feb.). Sustainable competitive advantage – What it is, what it isn't. *Business Horizons*.
- Cunha, M. P. & da Cunha, J. V. (2006). Towards a complexity theory of strategy. *Management Decision*, 44(7), 839-850.
- Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, 31(6), 1476-1484.

- Daengbuppha, J., Hemmington, N., & Wilkes, K. (2006). Using grounded theory to model visitor experiences at heritage sites. *Qualitative Market Research: An International Journal*, 9(4), 367-388.
- Darke, P., Shanks, G. & Broadbent, M. (1998). Successfully completing case study research: Combining rigour, relevance and pragmatism. *Information Systems Journal*, 8, 273-289.
- David, P. A. (1985). Clio and the economics of QWERTY. *American Economic Review*, 75(2), 332-337.
- David, P. A. (2007). Path dependence: A foundational concept for historical social science. *Cliometrica*, 1, 91-114.
- Dawson, C. (2002). *Practical research methods: A user-friendly guide to mastering research techniques and projects*. Oxford: How-to-Books Ltd.
- De Chabert, J. M. (1998). A model for the development and implementation of core competencies in restaurant companies for superior financial performance. PhD Thesis, Virginia Polytechnic Institute & State University, Virginia.
- Dierickx, I. & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35, 1504-1513.
- Dopfer, K. (1991). Towards a theory of economic institutions: Synergy and path dependency. *Journal of Economic Issues*, XXV(2), 535-550.
- Dunning, H., Williams, A., Abonyi, S. & Crooks, V. (2008). A mixed methods approach to quality of life research: A case study approach. *Soc. Indic. Res.*, 85(2), 145-158.
- Dyer, J. H. & Singh, H. (1998). The relational view: Cooperative strategy and sources of inter-organizational competitive advantage. *Academy of Management Review*, 23(4), 660-679.
- Easterby-Smith M. & Prieto, I. M. (2007). Dynamic capabilities and knowledge management: An integrative role for learning. *British Journal of Management*, 19(3).

- Eaves, Y. D. (2001). A synthesis technique from grounded theory data analysis. *Journal of Advanced Nursing*, 35(5), 654-663.
- Eidelson, Roy, J. (1997). Complex adaptive systems in the behavioral and social sciences. *Review of General Psychology*, 1(1), 42-71.
- Van Eijnatten, F. M. & Putnik, G. D. (2004). Chaos, complexity, learning, and the learning organization: Towards a chaordic enterprise. *The Learning Organization*, 11(6), 418-429.
- Eisenhardt, K. M. & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10/11), 1105-1121.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K. M. (1988, Sep.). Agency- and institutional-theory explanations: The case of retail sales compensation. *The Academy of Management Journal*, 31(3), 488-511.
- Eriksson, P. & Kovalainen, A. (2008). *Qualitative methods in business research*. London: Sage Publications Inc.
- Espino-Rodriguez, T. F. & Padron-Robaina, V. (2006). A review of outsourcing from the resource-based view of the firm. *International Journal of Management Reviews*, 8(1), 49-70.
- Fahy, J. (2000). The resource-based view of the firm: Some stumbling blocks on the road to understanding sustainable competitive advantage. *Journal of European Industrial Training*, 24(ii-iv), 94-104.
- Fahy, J. & Smithee, A. (1999). Strategic marketing and the resource-based view of the firm. *Academy of Marketing Science Review*, 10.
- Fawcett, B. & Hearn, J. (2004). Researching others: epistemology, experience, standpoints and participation. *International Journal of Social Research Methodology*, 7(3), 201-218.
- Fiol, C. M. (2001). Revisiting an identity-based view of sustainable competitive advantage. *Journal of Management*, 27, 691-699.

- Foray, D. (1997). The dynamic implications of increasing returns: Technological change and path dependent inefficiency. *International Journal of Industrial Organization*, 15, 733-752.
- Gelfand, Michael (1978). *A non-racial island of learning: A history of the University College of Rhodesia from its inception to 1966*. Gwelo: Mambo Press.
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Goodstein, E. (1995, December). The economic roots of environmental decline: Property rights or path dependence? *Journal of Economic Issues*, XXIX(4), 1029-1043.
- Gorelick, C. K. (2000). Toward an understanding of organizational learning and collaborative technology: A case study of structuration and sensemaking in a virtual project team, Doctor of Education, The George Washington University.
- Goulding, C. (1998). Grounded theory: The missing methodology on the interpretivist agenda. *Qualitative Market Research: An International Journal*, 1(1), 50-57.
- Goulielmos, A. M. (2005). Complexity theory: A science where historical accidents matter. *Disaster Prevention and Management*, 14(4), 533-547.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114-135.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109-122.
- Greener, I. (2002). Theorising path-dependency: How does history come to matter in organisations? *Management Decision*, 40(6), 614-619.
- Hackett, G. (1981, May). Survey research methods. *The Personnel and Guidance Journal*, 599-604.



- Haigh, C. (2002). Using chaos theory: The implications for nursing. *Journal of Advanced Nursing*, 37(5), 462-469.
- Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic Management Journal*, 14, 607-618.
- Harris, S. & Ghauri, P. (1998, March). Strategy formation by business leaders: Exploring the influence of national values. *European Journal of Marketing*, 34(1/2).
- Hart, S. L. (1995). A natural resource-based view of the firm. *Academy of Management Review*, 20(4), 986-1014.
- Haynes, P. (2007, June). Chaos, complexity and transformations in social care policy in England. *Public Money & Management*, 199-206.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24, 997-1010.
- Helo, P. & Kekäle, T. (2006). Is development of organisational culture a path-dependent process? *International Journal of Innovation and Learning*, 3(1), 63-76.
- Herrmann, P. (2005). Evolution of strategic management: The need for new dominant designs. *International Journal of Management Reviews*, 7(2), 111-130.
- Hock, D. W. (2000). *Birth of the chaordic age*. San Francisco: Berrett Koehler Publishers.
- Hodson, L. M. N. (nd). Speech: President of the Rhodesia University Association.
- Hodson, L. M. N. (1955). (Historical Manuscripts), The Rhodesian University College Inaugural Board, National Archives of Zimbabwe
- Holland, J. H. (1995). *Hidden order: How adaptation builds complexity*. Massachusetts: Addison-Wesley Publishing Company Inc.
- Hoopes, D. G., Madsen, T. L. & Walker, G. (2003). Guest editors' introduction to the special issue: Why is there a resource-based view?

- Toward a theory of competitive heterogeneity. *Strategic Management Journal*, 24, 889-902.
- Hoskisson, R. E., Eden, L., Lau, C. M. & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249-267.
- Hughes, J. (1994). *The philosophy of social research*. Essex: Longman.
- Jack, E. P. & Raturi, A. S. (2006). Lessons learned from methodological triangulation in management research. *Management Research News*, 29(6), 345-357.
- Jick, T. D. (1979, December). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24, 602-611.
- Katz, M. L. & Shapiro, C. (1995, June). Network externalities, competition, and compatibility. *American Economic Review*, 75(3), 424-440.
- Kay, A. (2003, June). Path dependency and the CAP. *Journal of European Public Policy*, 10(3), 405-420.
- Kearney, M. H. (1998). Ready-to-wear: Discovering grounded formal theory. *Research in Nursing & Health*, 21, 179-186.
- Kennedy, P. L. & Luzar, E. J. (1999, Autumn-Winter). Toward methodological inclusivism: The case for case studies. *Review of Agricultural Economics*, 21(2), 579-591.
- King, A. W. & Zeithml, C. P. (2001). Competencies and firm performance: Examining the causal ambiguity paradox. *Strategic Management Journal*, 22, 75-99.
- Kirkwood, K. (1979). The earlier history of the University of Rhodesia: A Review on Gelfand, M. (1978). *A non-racial island of learning: A history of the University College of Rhodesia from its inception to 1966*. Gwelo: Mambo Press.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques, 2<sup>nd</sup> revised edition*. New Delhi: New Age International Publishers.

- Kraaijenbrink, J., Spender, J. C. & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349-372.
- Krejčí, J. (2010). Approaching quality in survey research: Towards a comprehensive perspective. *Czech Sociological Review*, 46(5), 1011-1033.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Lado, A. A., Boyd, N. G., Wright, P. & Kroll, M. (2006). Paradox and theorizing within the resourced-based view. *Academy of Management Review*, 31(1), 115-131.
- Lamberg, J., Pajunen, K., Parvinen, P. & Savage, G. T. (2008). Stakeholder management and path dependence in organizational transitions. *Management Decision*, 46(6), 846-863.
- Lamberg, J. & Tikkanen, H. (2006). Changing sources of competitive advantage: Cognition and path dependence in the Finnish retail industry 1945-1995. *Industrial and Corporate Change*, 15(5), 811-846.
- Lancaster, G. (2005). *Research methods in management: A concise introduction to research in management and business consultancy*. Oxford: Elsevier-Butterworth-Heinemann.
- Lavie, D. (2006). The competitive advantage of interconnected firms: An extension of the resource-based view. *Academy of Management Review*, 31(3), 638-658.
- Lee, N. & Lings, I. (2008). *Doing business research: A guide to theory and practice*. London: Sage Publications Ltd.
- Leedy, P. D. & Ormrod, J. E. (2005). *Practical research: Planning and design, 8<sup>th</sup> edition*. New Jersey: Pearson Education.
- Levy, D. (1994). Chaos theory and strategy: Theory, application, and managerial implications. *Strategic Management Journal*, 15, 167-178.
- Lichtenstein, B. M. B. (2000). Emergence as a process of self-organizing: New assumptions and insights from the study of non-linear dynamic

- systems. *Journal of Organizational Change Management*, 13(6), 526-544.
- Liebowitz, S. J. & Margolis, S. E. (1990, April). The fable of the keys. *Journal of Law and Economics*, 33(1), 1-25.
- Liebowitz, S. J. & Margolis, S. E. (1994). Network externality: An uncommon tragedy. *Journal of Economic Perspectives*, 8(2), 133-150.
- Liebowitz, S. J. & Margolis, S. E. (1995). Path dependence, lock-in, and history. *Journal of Law, Economics, & Organization*, 11(1), 205-226.
- Lin, H. (2006, September). Inter-organizational collaboration, social embeddedness, and value creation: A theoretical analysis. *International Journal of Management*, 23(3), 548-558.
- Lippman, S. A. & Rumelt, R. P. (1982). Uncertain inimitability: An analysis of interfirm differences in efficiency under competition. *Bell Journal of Economics*, 13(2), 418-438.
- McBride, N. (2005). Chaos theory as a model for interpreting information systems in organizations. *Information Systems Journal*, 15, 233-254.
- McCallin, A. M. (2003). Designing a grounded theory study: Some practicalities. *Nursing in Critical Care*, 8(5), 203-208.
- McCormack, C. (2004). Storying stories: A narrative approach to in-depth interview conversations. *International Journal of Social Research Methodology*, 7(3), 219-236.
- McEvily, B. & Zaheer, A. (1999). Bridging ties: A source of firm heterogeneity in competitive capabilities. *Strategic Management Journal*, 20, 1133-1156.
- McGhee, G., Marland, G. R. & Atkinson, J. (2007). Grounded theory research: Literature reviewing and reflexivity. *Jan: Research Methodology*.
- Mackenzie, C. G. (1987). The University of Rhodesia: A reappraisal. *Journal of Educational Administration and History*, 19(2), 62-71.

- Mahalingam, A. & Levitt, R. E. (2007, July). Institutional theory as a framework for analyzing conflicts on global projects. *Journal of Construction Engineering and Management*, 517-528.
- Mahoney, J. (2000). Path dependence in historical sociology. *Theory and Society*, 29, 507-548.
- Mahoney, J. T. & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363-380.
- Makadok, R. (2001). Towards a synthesis of resource-based and dynamic capability views of rent creation. *Strategic Management Journal*, 22(5), 387-402.
- Manson, S. M. (2001). Simplifying complexity: A review of complexity theory. *Geoforum*, 32, 405-414.
- Marcus A. A. & Anderson, M. H. (2006, January). A general dynamic capability: Does it propagate business and social competencies in the retail food industry? *Journal of Management Studies*, 43(1), 19-46.
- Marczyk, D., Dematteo, D. & Festinger, D. (2005). *Essentials of research design and methodology*. New Jersey: John Wiley & Sons Inc.
- Mason, Roger, B. (2007). The external environment's effect on management and strategy: A complexity theory approach. *Management Decision*, 45(1), 10-28.
- Maxwell, I. C. M. (1980). *Universities in partnership: The inter-university council and the growth of higher education in developing countries, 1947-70*. Edinburgh: Scottish Academic Press.
- Menon, A. D. (2008, March), Revisiting dynamic capability. *IIMB Management Review*, 22-33.
- Miles, M. B. (1979, December). Qualitative data as an attractive nuisance: The problem of analysis. *Administrative Science Quarterly*, 24, 590-601.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source book, 2<sup>nd</sup> edition*. Sage Publications.

- Miller, D. & Shamsie, J. (1996). The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. *Academy of Management Journal*, 39(iii), 519-543.
- Mlambo, A. S. (1995, September). Student protest and state reaction in colonial Rhodesia: The 1973 *Chimukwembe* student demonstration at the University of Rhodesia. *Journal of Southern African Studies*, 21(3), 473-490.
- Molina-Azorin, J. F. (2009). Understanding how mixed methods research is undertaken within a specific research community: The case of business studies. *International Journal of Multiple Research Approaches*, 3(1), 47-57.
- Morris, Charles (1964). Report of the University College Review Commission. *Southern Rhodesia Miscellaneous Reports, 1963-1964*.
- Muranda Z. (1999). Research methods. Unpublished.
- Mwangi, E. (2006). The footprints of history: Path dependence in the transformation of property rights in Kenya's Maasailand. *Journal of Institutional Economics*, 2(2), 157-180.
- Nee, V. & Cao, Y. (1999). Path dependent societal transformation: Stratification in hybrid mixed economies. *Theory and Society*, 28, 799-834.
- Nelson, R. R. & Winter, S. G. (1982). *The evolutionary theory of economic change*. Cambridge-Mass.: The Belknap Press of Harvard University Press.
- Nieto, M. & Pérez, W. (2000). The development of theories from the analysis of the organisation: Case studies by patterns of behaviour. *Management Decision*, 38(10), 723-733.
- North, D. C. (1999). *Institutions, institutional change, and economic performance*. United Kingdom: Cambridge University Press.
- O'leary, Z. (2004). *The essential guide to doing research*. London: Sage Publications Ltd.

- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18(9), 697-713.
- Page, S. E. (2006). Path dependence. *Quarterly Journal of Political Science*, 1, 87-115.
- Pascale, R. T. (1999, Spring). Surfing the edge of chaos. *Sloan Management Review*, 40(3), 83-94.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York: John Wiley.
- Perry, C. (1998). Processes of a case study methodology for postgraduate research in marketing. *European Journal of Marketing*, 32(9/10), 785-802.
- Peter, C., de Lange, W., Musango, J. K., April, K. & Potgieter, A. (2009). Applying Bayesian modelling to assess climate change effects on biofuel production. *Climate Research*, 40, 249-260.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179-191.
- Peteraf, M. A. & Barney, J. B. (2003). Unravelling the resource-based tangle. *Managerial and Decision Economics*, 24, 309-323.
- Peteraf, M. A. & Bergen, M. E. (2003). Scanning dynamic competitive landscapes: A market-based and resource-based framework. *Strategic Management Journal*, 24, 1027-1041.
- Petrov, V. (2010). Dynamic ontology as an ontological framework of anticipatory systems. *Foresight*, 12(3), 38-49.
- Pettigrew, A. M. (1985). *The awakening giant: Continuity and change in ICI*. London: Blackwell.
- Pierson, P. (2000, June). Increasing returns, path dependence, and the study of politics. *The American Political Science Review*, 94(2), 251-267.
- Porter, M. E. (1979, March.-April). How competitive forces shape strategy. *Harvard Business Review*, 137-145.

- Porter, M. E. (1980). *Competitive strategy*. New York: Free Press.
- Porter, M. E. (1981). The contributions of industrial organisation to strategic management. *Academy of Management Review*, 6, 609-620.
- Porter, M. E. (1985). *Competitive advantage*. New York: Free Press.
- Potgieter, A., April, K. & Bishop, J. (2005). Complex adaptive enterprises. In M. Khosrow-Pour (Ed.), *Encyclopaedia of Information Science and Technology*. Hershey, PA: Idea Group Reference, 475-480.
- Potgieter, A., April, K. A., Cooke, R. J. E. & Osunmakinde, I. O. (2009). Temporality in link prediction: Understanding social complexity. *E:CO*, 11(1), 69-83.
- Powell, T. C. (2001). Competitive advantage: Logical and philosophical considerations. *Strategic Management Journal*, 22, 875-888.
- Powell, T. C. & Dent-Micallef, A. (1997). Information technology as competitive advantage: The role of human, business, and technology resources. *Strategic Management Journal*, 18(v), 375-405.
- Prahalad, C. K. & Hamel, G. (1990, May/June). The core competence of the corporation. *Harvard Business Review*, 79-91.
- Priem, L. R. & Butler, J. E. (2001). Is the resource-based 'view' a useful perspective for strategic management research? *Academy of Management Review*, 26(i), 22-40.
- Puffert, D. J. (2002). Path dependence in spatial networks: The standardization of railway track gauge. *Explorations in Economic History*, 39, 282-314.
- Punch, K. F. (2004). *Introduction to social research: Quantitative & qualitative approaches*. London: Sage Publications.
- Ragin, C. C. (1989). *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley, Los Angeles: University of California Press.
- Ray, S. & Ramakrishnan, K. (2006). Resources, competencies and capabilities conundrum: A back-to-basics call. *Decision*, 33(2), 1-24.



- Reed, R. & DeFillippi, R. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15(1), 88-102.
- Report on Education for the Year Ended 31<sup>st</sup> December, 1964.
- Report on Education for the Year Ended 31<sup>st</sup> December, 1967.
- Rhodesia University Association. (1947). A University in Rhodesia ... A Matter of Urgency.
- Rhodesia University Association (1950, 7 September). Address Given by His Excellency Sir John Kennedy, Governor of Southern Rhodesia and Patron of the Rhodesia University Association, on the occasion of the formal handing over of the Trustees of the Rhodesia University Foundation Fund by His worship the Mayor of Salisbury, Councillor R. M. Cleveland at the University Site.
- Robinson, J. V. (1933). *The economics of imperfect competition*. London: MacMillan.
- Roe, M. J. (1996, January). Chaos and evolution in law and economics. *Harvard Law Review*, 109(3), 641-668.
- Rosenhead, J. (1998). Complexity theory and management practice. Unpublished.
- Rumelt, R. (1984). Towards a strategic theory of the firm. In Lamb, R. (Ed.), *Competitive strategic management*. Englewood Cliffs: Prentice-Hall, 556-570.
- Rumelt, R. (1991). How much does industry matter? *Strategic Management Journal*, 12, 167-185.
- Ruttan V. W. (1997, September). Induced innovation, evolutionary theory and path dependence: Sources of technical change. *The Economic Journal*, 107, 1520-1529.
- S692 Memo by Cowling, 11 May, 1944, National Archives of Zimbabwe.
- Saunders, M. Lewis, P. & Thornhill, A. (1997). *Research methods for business students, 3<sup>rd</sup> edition*. Singapore: Pearson Education.

- Saunders, M. Lewis, P. & Thornhill, A. (2003). *Research methods for business students*. Financial Times Pitman Publishing.
- Schmidt, M. (2010). Quantification of transcripts from depth interviews, open-ended responses and focus groups: Challenges, accomplishments, new applications and perspectives for market research. *International Journal of Market Research*, 52(4), 483-509.
- Schneider, M. & Somers, M. (2006). Organizations as complex adaptive systems: Implications of complexity theory for leadership research. *The Leadership Quarterly*, 17, 351–365.
- Schreyögg, G. & Kliesch-Eberl, M. (2007). How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal*, 28, 913-933.
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York: George Allen & Unwin.
- Schwartz, Herman (2004). Down the wrong path: Path dependence, increasing returns, and historical institutionalism. Unpublished, University of Virginia.
- Scott, W. R. (1987, Dec.). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493-511.
- Scott, K. W. & Howell, D. (2008). Clarifying analysis and interpretation in grounded theory: Using conditional relationship guide and reflective coding matrix. *International Journal of Qualitative Methods*, 7(2), 1-15.
- Sekaran, U. (2000). *Research methods for business: A skill-building approach, 3<sup>rd</sup> edition*. New York: Wiley.
- Shockley, M. L. (2003). Understanding the use of the internet by teachers: A comparative study of teachers' experiences in California, England and Singapore. PhD Thesis, Said Business School, Oxford University.
- Singh, Y. K. (2006). *Fundamentals of research methodology and statistics*. New Delhi: New Age International Publishers.
- Smith, A. C. T. & Graetz, F. (2006). Complexity theory and organizing form dualities. *Management Decision*, 44(7), 851-870.

- Sobh, R. & Perry, C. (2006). Research design and data analysis in realism research. *European Journal of Marketing*, 40(11/12), 1194-1209.
- Soulliere, D., Britt, D. W. & Maines, D.R. (2001). Conceptual modelling as a toolbox for grounded theorists. *The Sociological Quarterly*, 42(2), 253-269.
- Spanos, Y. E. & Lioukas, S. (2001). An explanation into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22, 907-934.
- Srnka, K. J. & Koeszegi, S. T. (2007, January). From words to numbers: How to transform qualitative data into meaningful quantitative results. *SBR*, 59, 29-57.
- Stacey, R. (2007). The challenge of human interdependence: Consequences for thinking about the day to day practice of management in organizations. *European Business Review*, 19(4), 292-302.
- Stacey, R. (1995). The science of complexity. *Strategic Management Journal*, 16, 477-495.
- Stacey, R. (1992). *Managing chaos: Dynamic strategies in an unpredictable world*. London: Saxon Printing Ltd.
- Stack, M. & Gartland, M. P. (2003, June). Path creation, path dependency, and alternative theories of the firm. *Journal of Economic Issues*, XXXVII(2), 487-494.
- Stanley, D. (1970). University College of Rhodesia: The embattled enclave. *Youth Action*, 2.
- Sterman, J. D. & Wittenberg, J. (1999, May-June). Path dependence, competition, and succession in the dynamics of scientific revolution. *Organization Science*, 10(3), 322-341.
- Stokes, D. & Bergin, R. (2006). Methodology or "methodolatry"? An evaluation of focus groups and depth interviews. *Qualitative Market Research: An International Journal*, 9(1), 26-37.

- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: Sage Publications.
- Sunday Mail*. (1942, 2 August).
- Sunday Mail*. (1944, 14 May).
- Sutton, B. (1993). The rationale for qualitative research: A review of principles and theoretical foundations. *The Library Quarterly*, 63(4), 411-430.
- Svyantek, D. J. & Brown, L. L. (2000). A complex-systems approach to organizations. *Current Directions in Psychological Science*, 9(2), 69-74.
- Sydow, J., Schreyögg, G. & Koch, J. (2009). Organizational path dependence: Opening the black box. *Academy of Management Review*, 34(4), 689-709.
- Teece, D. J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Thiéart, R. A & Forgues, B. (1995). Chaos theory and organization. *Organization Science*, 6(1), 19-31.
- Torring, J. (2001). Path-dependent Danish welfare reforms: The contribution of the new institutionalism to understanding evolutionary change. *Scandinavian Political Studies*, 24(4), 277-309.
- University College of Rhodesia and Nyasaland (n.d.), How the College is Growing, National Archives of Zimbabwe. Unpublished.
- Van Maanen, J. (1979). Reclaiming qualitative methods for organizational research: A preface. *Administrative Science Quarterly*, 520-26.
- Valle, V. (2000). Chaos, complexity and deterrence, National War College, Unpublished, 1-12.
- Verschuren, P. J. M. (2003). Case study as a research strategy: Some ambiguities and opportunities. *International Journal of Social Science Research Methodology*, 6(2), 121-139.

- Walls, P., Parahoo, K. & Fleming, P. (2010). The role and place of knowledge and literature in grounded theory. *Nurse Researcher*, 17(4), 8-17.
- Walsham, G. (1995). The emergence of interpretivism in IS research. *Information Systems Research*, 6(4), 376-394.
- Wang, C. L. & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews*, 9(i), 31-51.
- Ward, M. (1995, August). Butterflies and bifurcations: Can chaos theory contribute to our understanding of family systems? *Journal of Marriage and the Family*, 57, 629-638.
- Weber, R. (2004, March). The rhetoric of positivism versus interpretivism: A personal view. *MIS Quarterly*, 28(1), iii-xii.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wernerfelt, B. (1989). From critical resources to corporate strategy. *Journal of General Management*, 14, 4-12.
- Whetten, D. A. (1999). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490-495.
- Wilson, M. & Sapsford, R. (2004). Asking questions. In Sapsford, R. & Jupp, V. (Eds.), *Data collection and analysis, 2<sup>nd</sup> edition*. London: Sage Publications.
- Witt, U. (1997). Lock-in vs critical masses – industrial change under network externalities. *International Journal of Industrial Organization*, 15, 753-773.
- Wright, M., Filatotchev, I., Hoskisson, R. E. & Peng, M. W. (2005, Jan.). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, 42(1), 1-33.
- Yin, R. K. (1981, March). The case study crisis: Some answers. *Administrative Science Quarterly*, 26, 58-65.

- Yin, R. K. (1994). *Case study research: Design and methods*, 2<sup>nd</sup> edition. Thousand Oaks: Sage Publications.
- Young, P. V. & Schmidt, C. F. (1966). *Scientific social surveys and research*, 4<sup>th</sup> edition. New Jersey: Prentice-Hall.
- Zajac, E. (1995). SMJ 1994 best paper prize to Birger Wernerfelt. *Strategic Management Journal*, 16(3), 169-170.
- Zikmund, W. G. (2000). *Business research methods*, 6<sup>th</sup> edition. Fort Worth, TX: Dryden Press.
- Zikmund, W. G. (2003). *Business research methods*, 7<sup>th</sup> edition. South Western Cengage Learning.
- Zukowski, R. (2004). Historical path dependence, institutional persistence, and transition to market economy: The case of Poland. *International Journal of Social Economics*, 3 (10), 955-973.
- Zyglidopoulos, S. (1999, March). Initial environmental conditions and technological change. *Journal of Management Studies*, 36(2), 241-262.

**APPENDICES**

University of Cape Town

Inter-Item Correlation Matrix																																
	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	C8	C9	D1	D2	D3	D4	D5	E1	E2	E3	E4	E5
A1	1.00	0.10	0.13	-0.01	0.03	0.01	0.20	0.12	0.17	0.19	0.30	0.28	0.25	0.10	0.13	0.00	0.01	-0.08	0.26	0.37	0.27	0.11	0.04	0.12	0.16	0.25	0.16	0.06	0.01	0.22	0.11	-0.04
A2	0.10	1.00	0.16	0.19	0.18	0.32	0.56	0.22	0.37	0.03	0.19	0.10	0.24	0.34	0.29	0.03	0.07	0.08	0.17	0.11	-0.07	0.20	0.21	0.02	0.16	0.01	0.04	0.11	0.05	0.30	0.17	0.04
A3	0.13	0.16	1.00	0.04	-0.09	0.04	0.03	0.05	0.17	0.31	0.08	0.11	-0.03	-0.01	0.29	-0.08	-0.08	0.02	0.18	0.12	0.18	0.07	-0.08	-0.12	0.03	-0.11	0.13	0.05	0.15	0.19	-0.03	0.07
A4	-0.01	0.19	0.04	1.00	0.27	0.23	0.13	0.37	0.20	0.11	-0.04	0.04	0.07	0.32	0.11	0.23	0.21	0.19	0.18	0.07	0.09	0.10	0.49	0.33	0.01	0.01	0.05	-0.08	0.23	0.15	-0.02	0.12
A5	0.03	0.18	-0.09	0.27	1.00	0.70	0.24	0.29	0.25	-0.06	-0.05	0.02	0.14	0.38	0.19	0.08	0.08	0.08	0.12	0.06	-0.01	0.05	0.55	0.33	0.13	-0.01	0.10	-0.34	0.18	0.09	0.08	0.19
A6	0.01	0.32	0.04	0.23	0.70	1.00	0.47	0.31	0.41	-0.05	-0.05	-0.07	0.04	0.32	0.28	0.08	-0.02	0.06	0.12	0.15	-0.02	-0.02	0.40	0.31	0.03	-0.18	0.01	-0.32	0.17	0.10	-0.01	0.13
B1	0.20	0.56	0.03	0.13	0.24	0.47	1.00	0.31	0.56	-0.24	0.10	0.00	0.11	0.35	0.21	0.13	0.06	0.12	0.06	0.09	-0.07	-0.05	0.17	0.23	0.08	0.10	0.00	-0.11	0.09	0.11	0.01	0.00
B2	0.12	0.22	0.05	0.37	0.29	0.31	0.31	1.00	0.68	0.07	-0.12	0.29	0.24	0.52	0.44	0.22	0.20	0.11	0.17	0.20	0.24	0.10	0.57	0.27	0.21	0.31	0.45	0.03	0.30	0.32	0.12	0.18
B3	0.17	0.37	0.17	0.20	0.25	0.41	0.56	0.68	1.00	0.08	0.09	0.26	0.22	0.44	0.40	0.30	0.26	0.28	0.29	0.25	0.23	0.09	0.51	0.28	0.13	0.15	0.32	0.18	0.45	0.39	0.16	0.02
B4	0.19	0.03	0.31	0.11	-0.06	-0.05	-0.24	0.07	0.08	1.00	0.35	0.38	0.24	0.09	0.45	0.07	0.13	0.27	0.35	0.34	0.47	0.43	0.21	0.01	0.13	0.01	0.31	0.12	0.05	0.28	0.07	0.30
B5	0.30	0.19	0.08	-0.04	-0.05	-0.05	0.10	-0.12	0.09	0.35	1.00	0.56	0.43	0.21	0.26	0.29	0.05	0.14	0.35	0.24	0.28	0.17	0.00	0.13	0.07	0.08	0.14	0.01	0.08	0.26	0.18	0.01
B6	0.28	0.10	0.11	0.04	0.02	-0.07	0.00	0.29	0.26	0.38	0.56	1.00	0.77	0.29	0.38	0.19	0.09	0.21	0.36	0.31	0.37	0.18	0.31	0.14	0.25	0.25	0.38	0.06	0.32	0.34	0.09	0.07
B7	0.25	0.24	-0.03	0.07	0.14	0.04	0.11	0.24	0.22	0.24	0.43	0.77	1.00	0.34	0.27	0.17	0.10	0.28	0.15	0.25	0.28	0.31	0.29	0.23	0.43	0.22	0.30	0.01	0.26	0.22	0.21	0.11
C1	0.10	0.34	-0.01	0.32	0.38	0.32	0.35	0.52	0.44	0.09	0.21	0.29	0.34	1.00	0.35	0.36	0.12	0.18	0.23	0.16	0.26	0.03	0.58	0.48	0.36	0.39	0.39	-0.03	0.31	0.39	0.20	0.03
C2	0.13	0.29	0.29	0.11	0.19	0.28	0.21	0.44	0.40	0.45	0.26	0.38	0.27	0.35	1.00	0.06	0.00	0.02	0.44	0.38	0.35	0.31	0.41	0.04	0.27	0.14	0.48	-0.05	0.27	0.55	0.18	0.21
C3	0.00	0.03	-0.08	0.23	0.08	0.08	0.13	0.22	0.30	0.07	0.29	0.19	0.17	0.36	0.06	1.00	0.42	0.32	0.24	0.32	0.32	0.07	0.31	0.22	0.06	0.07	-0.04	0.12	0.19	0.14	0.18	-0.09
C4	0.01	0.07	-0.08	0.21	0.08	-0.02	0.06	0.20	0.26	0.13	0.05	0.09	0.10	0.12	0.00	0.42	1.00	0.64	0.13	0.24	0.29	0.22	0.20	0.27	0.04	0.13	0.25	0.35	0.16	0.16	0.12	
C5	-0.08	0.08	0.02	0.19	0.08	0.06	0.12	0.11	0.28	0.27	0.14	0.21	0.28	0.18	0.02	0.32	0.64	1.00	0.12	0.13	0.37	0.17	0.18	0.15	-0.02	0.01	0.25	0.17	0.19	0.13	0.13	0.18
C6	0.26	0.17	0.18	0.18	0.12	0.12	0.06	0.17	0.29	0.35	0.35	0.36	0.15	0.23	0.44	0.24	0.13	0.12	1.00	0.66	0.51	0.24	0.25	0.15	0.07	-0.01	0.36	0.11	0.32	0.53	0.05	0.07
C7	0.37	0.11	0.12	0.07	0.06	0.15	0.09	0.20	0.25	0.34	0.24	0.31	0.25	0.16	0.38	0.32	0.24	0.13	0.66	1.00	0.72	0.33	0.24	0.15	0.18	0.15	0.31	0.13	0.14	0.42	0.14	0.11
C8	0.27	-0.07	0.18	0.09	-0.01	-0.02	-0.07	0.24	0.23	0.47	0.28	0.37	0.28	0.26	0.35	0.32	0.29	0.37	0.51	0.72	1.00	0.36	0.22	0.19	0.13	0.18	0.38	0.05	0.12	0.41	0.17	0.20
C9	0.11	0.20	0.07	0.10	0.05	-0.02	-0.05	0.10	0.09	0.43	0.17	0.18	0.31	0.03	0.31	0.07	0.22	0.17	0.24	0.33	0.36	1.00	0.25	0.05	0.19	-0.01	0.38	0.19	-0.01	0.27	0.14	0.45
D1	0.04	0.21	-0.08	0.49	0.55	0.40	0.17	0.57	0.51	0.21	0.00	0.31	0.29	0.58	0.41	0.31	0.20	0.18	0.25	0.24	0.22	0.25	1.00	0.51	0.20	0.27	0.30	-0.06	0.40	0.36	0.07	0.13
D2	0.12	0.02	-0.12	0.33	0.33	0.31	0.23	0.27	0.28	0.01	0.13	0.14	0.23	0.48	0.04	0.22	0.27	0.15	0.15	0.15	0.19	0.05	0.51	1.00	0.08	0.22	0.14	-0.04	0.21	0.06	0.09	0.03
D3	0.16	0.16	0.03	0.01	0.13	0.03	0.08	0.21	0.13	0.13	0.07	0.25	0.43	0.36	0.27	0.06	0.04	-0.02	0.07	0.18	0.13	0.19	0.20	0.08	1.00	0.49	0.28	0.18	0.22	0.11	0.36	0.14
D4	0.25	0.01	-0.11	0.01	-0.01	-0.18	0.10	0.31	0.15	0.01	0.08	0.25	0.22	0.39	0.14	0.07	0.13	0.01	-0.01	0.15	0.18	-0.01	0.27	0.22	0.49	1.00	0.41	0.33	0.27	0.24	0.18	-0.12
D5	0.16	0.04	0.13	0.05	0.10	0.01	0.00	0.45	0.32	0.31	0.14	0.38	0.30	0.39	0.48	-0.04	0.25	0.25	0.36	0.31	0.38	0.38	0.30	0.14	0.28	0.41	1.00	0.19	0.34	0.46	0.03	0.27
E1	0.06	0.11	0.05	-0.08	-0.34	-0.32	-0.11	0.03	0.18	0.12	0.01	0.06	0.01	-0.03	-0.05	0.12	0.35	0.17	0.11	0.13	0.05	0.19	-0.06	-0.04	0.18	0.33	0.19	1.00	0.22	0.20	0.40	-0.15
E2	0.01	0.05	0.15	0.23	0.18	0.17	0.09	0.30	0.45	0.05	0.08	0.32	0.26	0.31	0.27	0.19	0.16	0.19	0.32	0.14	0.12	-0.01	0.40	0.21	0.22	0.27	0.34	0.22	1.00	0.53	0.09	-0.18
E3	0.22	0.30	0.19	0.15	0.09	0.10	0.11	0.32	0.39	0.28	0.26	0.34	0.22	0.39	0.55	0.14	0.11	0.13	0.53	0.42	0.41	0.27	0.36	0.06	0.11	0.24	0.46	0.20	0.53	1.00	0.13	0.01
E4	0.11	0.17	-0.03	-0.02	0.08	-0.01	0.01	0.12	0.16	0.07	0.18	0.09	0.21	0.20	0.18	0.18	0.16	0.13	0.05	0.14	0.17	0.14	0.07	0.09	0.36	0.18	0.03	0.40	0.09	0.13	1.00	0.09
E5	-0.04	0.04	0.07	0.12	0.19	0.13	0.00	0.18	0.02	0.30	0.01	0.07	0.11	0.03	0.21	-0.09	0.12	0.18	0.07	0.11	0.20	0.45	0.13	0.03	0.14	-0.12	0.27	-0.15	-0.18	0.01	0.09	1.00



## Appendix 1: Research Letter of Introduction

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University of Cape Town | Private Bag X3  
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Professor Kurt April  
Tel: +27 21 406 1411  
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Email: kurt.april@gsb.uct.ac.za



11<sup>th</sup> October 2009

Dear Sir/Madam

### RESEARCH LETTER OF INTRODUCTION

We would like to introduce to you, **Maurice Mutowo**, Acting Director of the Graduate School of Management at the University of Zimbabwe. Maurice is currently completing a PhD (doctoral studies) at the University of Cape Town (South Africa).

He is beginning the phase of research interviews during his studies, which is entitled: **A Resource-Based View of the Firm: A Path Dependency Investigation into the Sources of Sustainable Competitive Advantage – An Empirical Study of the University of Zimbabwe, 1945-1980**. The main thrust of this doctorate being the understanding of the role of path dependency (loosely defined as “what has happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time”) in the competitive advantage of the University of Zimbabwe as an educational institution, and the long-term sustainability of that advantage over time.

We are writing to you because, as Research Supervisor and Director of the Graduate School of Business at the University of Cape Town (South Africa), Maurice has assured us that you are able to provide good insight into the topic under research.

Please understand that the University of Cape Town upholds high levels of confidentiality and ethical standards in conducting research – and which Maurice will discuss with you, as introduction to his research.

We would like to thank you for your cooperation and consideration in this regard.

Sincerely

Prof. Kurt April  
(Research Supervisor)

Prof. Walter Baets  
(Director: GSB)

**Appendix 2: Release Form**

# Release Form

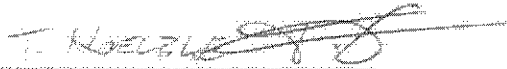

The information gathered from me will be held in strictest confidence, and its primary use is in completion of a PhD at the Graduate School of Business of the University of Cape Town (South Africa). It is understood by myself that the results hereof will be used for research purposes only.

I also  **DO** /  **DO NOT** (circle choice) give permission to Maurice Mutowo and Prof. Kurt April (his PhD supervisor) to conduct secondary research on *trend data and key themes*, in pursuit of a more robust and empirically-based understanding of the human condition and organisational dynamics through research, and subsequent publication for debate.

Please circle one choice out of the two possibilities below (if research permission has been given):

- Maurice Mutowo and Prof. April may conduct such research, drawing out trends and themes from our interview/questionnaire, and **MAY** use my name and appropriate quotations to highlight key areas/themes in the research, and in publication.
- Maurice Mutowo and Prof. April may conduct such research, drawing out trends and themes from our interview/questionnaire, but **MAY NOT** use my name, and any other information that can uniquely identify me in the research, or in publication.

I agree to hold the University of Cape Town, Maurice Mutowo and Prof. Kurt April, harmless from any liability, loss or damage caused by my statements or materials furnished by me.

	14-10-09
PRINT FULL NAME & SIGN	DATE
	GRADUATE SCHOOL OF BUSINESS
DESIGNATION/JOB TITLE	ORGANISATION/COMPANY
THOMAS.KOELBLE@gsb.uct.ac.za	021 406-1999
EMAIL	TELEPHONE



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### **Appendix 3: One-to-One Interviews: Round One**

#### **Participant Demographics**

##### **1. Gender**

Male	Female

##### **2. Profession**

	Current	Former
Academic		
Administrator		
Student		

##### **3. When did you join the UCRN/UCR/UR?**

1950-1960	
1960-1970	
1970-1980	

##### **4. Highest level of education**

Doctoral Degree	
Masters Degree	
Bachelors Degree	
High School	

##### **5. Faculty**

Agriculture	
Arts	
Commerce	
Education	
Engineering	
Law	
Medicine	
Science	
Social Studies	
Veterinary Studies	
Administration	

**Note:** The University was established first as the University College of Rhodesia and Nyasaland (UCRN), then it became the University College of Rhodesia (UCR) after Federation, then the University of Rhodesia (UR) and finally the University of Zimbabwe (UZ)

### **1. Initial Conditions**

1. What was the main motivation for the establishment of the University College of Rhodesia and Nyasaland (UCRN) in the 1950s?
2. What other options were available to prospective students who wanted to pursue higher education during those years?
3. During your period of involvement with University of Rhodesia, what in your opinion, were some of the key players, events, decisions and processes that influenced the institution's early development?
4. What were some of the initial challenges in the early days of UR: people challenges, decision challenges, process challenges and political challenges?
5. What factors mainly contributed to the success of the UR (up to 1980) as an institution of higher education? And what about those factors that made it significant or even unique?
6. How did these factors impact on the further development of UR?

### **2. Increasing Returns**

1. Where did the UR draw its students from prior to 1980 and why?
2. What were some of the factors that attracted students and lecturers to the UR?
3. As a result of the location of the UR in the capital city, did this help to attract complementary institutions and organisations to develop around the UR?
4. What were some of these organisations and institutions?
5. How did their development help to further consolidate the UR as a successful institution?
6. What were some of the events that suppressed the establishment of alternative institutions of higher learning?
7. What were some of the benefits and incentives that were enjoyed by students and lecturers at the UR?

### **3. Self-Reinforcement**

1. What were some of the factors that influenced prospective students to consider the UR as the destination of choice for higher education?

2. What were some of the positive and negative attributes of the UR that influenced students to choose the institution for their higher education?
3. In what ways did the UR maintain itself (politically, in the public eye, financially, and with other stakeholders) as the preferred institution of higher learning?
4. What benefits did other organizations, institutions and individuals gain by associating with UR?
5. How did the benefits enjoyed by students, administrators and lecturers help them to stick with UR between 1955-1980?
6. Once lecturers, administrators and students joined the UR, it became difficult to disengage from the institution because.....

#### **4. Positive Feedback**

1. Did the UR receive any feedback from stakeholders about its performance? What type of feedback did it receive? How? Any evidence of this feedback?
2. How did the UR use the feedback to help improve its status as an academic institution?
3. As more and more students attended the UR, did this help to improve the institution's reputation and image? How? Any evidence of this reputation?
4. How were prospective students influenced to join the UR?
5. How did society view those prospective students who failed to get a place at the UR? What pressures did the students have to endure, if any?

#### **5. Lock-In**

1. The UR became prominent because it took off first. Do you agree? Please explain.
2. What positive changes have occurred in the life of the institution?
3. What contributed most to this change [or continuity]?
4. As the UR became established as an institution of choice, were there other alternative institutions that students could have chosen to attend?

5. Did students develop a deep attachment to UR? Why? Any evidence of this deep attachment?
6. What made the lecturer jobs “sticky”, so that lecturers did not want to leave UR?
7. Were students uninterested in attending other institutions and decide to stay with UR? Why?
8. What ensured that other external stakeholders continued to work with the UR?
9. Are there decisions that you took in the early development of the institution that took you along a particular path?
10. What were these decisions and how do they account for what the UZ is today?

## **Appendix 4: One-to-One Interviews: Round Two**

### **1. Initial Conditions**

1. What motivated and attracted the founders of the University of Rhodesia to establish such an institution?
2. As a lecturer, why was the idea of a new University a compelling “future”/“vision” to put your energy behind?
3. What was the main motivation for the establishment of a multi-racial institution in a racist society? Positive and negative attributes of this experiment?
4. What did multi-racial mean in the early days, today in Zimbabwe, and for the future?
5. How did the special relationship (with London and Birmingham) influence the development of the University of Rhodesia?
6. What was the main influence of the Federation and the Unilateral Declaration of Independence (UDI) on the development of the University?

### **2. Increasing Returns**

1. Do you think that the developed infrastructure helped attract students and lecturers to join the University?
2. What is the legacy of that infrastructure? How is it viewed today?
3. To what extent was affordability a major consideration in making the University of Rhodesia the destination of choice in higher education?
4. What role did finance play at the University – endowments, state sponsorship, grants, etc. And in which ways did this make it easier for students to attend?
5. Were student numbers a factor in attracting lecturers at the institution and what did it mean in terms of research output?
6. What was the appetite for opening more institutions at the time?
7. Did “new research areas” help to attract lecturers to the institution?

### **3. Self-reinforcement**

1. Besides publicity efforts, what else was done to establish the reputation of the University?
2. How did the quality of teaching standards influence the development of the University?
3. What was put in place to ensure that such standards were kept over time?
4. What were some of the benefits for the University of Rhodesia and for London and Birmingham as a result of the linkages?
5. What work conditions for lecturers made it conducive to work at the University?

### **4. Positive Feedback**

1. What type of feedback did external examiners provided to the University of Rhodesia?
2. How did the University use this feedback to improve its operations?
3. What were the views of the White community, Black community, government, the media, commerce and industry, about the University?
4. How did these views influence the path and direction in which the University developed?

### **5. Lock-in**

1. What motivated academics to stay for such a long time at the University of Rhodesia?
2. What motivated administrators to stay for such a long time at the University of Rhodesia?
3. What has been the contribution of the University of Rhodesia to the development of society and the country as a whole?



## **Appendix 5: Questionnaire on Organisational Success: Pilot Study**

### **Participant Demographics**

#### **1. Gender**

Male	Female

#### **2. Profession**

	Current	Former
Academic		
Administrator		
Student		

#### **3. When did you join the UZ?**

1950-1960	
1960-1970	
1970-1980	

#### **4. Highest level of education**

Doctoral Degree	
Masters Degree	
Bachelors Degree	
High School	

#### **5. Faculty**

Agriculture	
Arts	
Commerce	
Education	
Engineering	
Law	
Medicine	
Science	
Social Studies	
Veterinary Studies	
Administration	

### **How to Answer the Questionnaire**

**For your answers, make use of the five (5) point Scale which varies from: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5) as illustrated below. Please note that the questions cover the period 1953-1980**

**1. The UZ was a successful and prominent institution of higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. Students at UZ were satisfied with their educational experiences at the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. Students at UZ achieved high levels of academic growth and development.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. Students at UZ were well prepared for entry into occupations and advancement in their careers after graduation.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**5. The UZ put sufficient emphasis on non-academic, non-career oriented areas of professional development in their teaching.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**6. The UZ Faculty and Administrators were satisfied with their employment at the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**7. The UZ put sufficient emphasis on Faculty publications, attendance at professional conferences and teaching at the 'cutting edge'.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**8. The UZ was an open institution which interacted well with its external environment, such as the community and professional service organisations.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**9. Because of its reputation as an institution, the UZ was able to attract high quality students, faculty and financial support.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**10. The UZ had very good relations with its students and faculty.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

## **Appendix 6: Questionnaire on Path Dependency: Pilot Study**

### **Participant Demographics**

#### **1. Gender**

Male	Female

#### **2. Profession**

	Current	Former
Academic		
Administrator		
Student		

#### **3. When did you join the UZ?**

1950-1960	
1960-1970	
1970-1980	

#### **4. Highest level of education**

Doctoral Degree	
Masters Degree	
Bachelors Degree	
High School	

#### **5. Faculty**

Agriculture	
Arts	
Commerce	
Education	
Engineering	
Law	
Medicine	
Science	
Social Studies	
Veterinary Studies	
Administration	

### **How to Answer the Questionnaire**

**For your answers, make use of the five (5) point Scale which varies from: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5) as illustrated below. Please note that the questions cover the period 1953-1980**

#### **(A). Initial conditions**

**1. The establishment and subsequent rise to prominence of the UZ started as a small idea.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**2. Early developments in the founding of UZ had a significant influence on the future success of the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. UZ structure, processes, and decisions still bear imprints of its past.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. UZ was an institution characterised by rationality, formality and order, mixed with intuition, informality and disorder.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**5. UZ was able to find solutions to its problems through experimentation.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**6. UZ was able to find solutions to its problems through self-organisation**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**(B). Increasing returns**

**1. Students, faculty and administrators were attracted to the UZ because of its reputation as an institution of higher education.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**2. The UZ acted as a magnet that attracted complementary organisations and institutions to develop a cluster in the capital city in proximity to the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. As more organisations and institutions developed in the capital city the development of the UZ as a successful institution was further boosted.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. As the UZ became more successful as an institution, the development of alternative institutions of higher learning was further suppressed.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**5. Students, faculty and administrators at UZ enjoyed the prestige of working and studying at UZ as a prominent institution and this narrowed their options only to this institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**(C). Self-reinforcement**

**1. Prospective students considered the UZ the preferred institution among others.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**2. Other institutions failed to develop in competition with the UZ because the latter had established itself as the standard institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. Students, faculty and administrators derived some benefits from their association with UZ.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. Once students, faculty and administrators joined the UZ it became difficult to disengage from the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**5. The UZ capitalised on the initial advantage that it enjoyed as the first institution to be established to continue dominating the market in higher education.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**(D). Positive Feedback**

**1. Organisations, institutions and individuals provided positive feedback to UZ's development thus further entrenching it as the institution of choice in the country.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**2. As more students, faculty and administrators joined the UZ, this helped to improve its reputation and prominence as the institution of choice.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. Students, faculty and administrators joined the UZ because it was the institution with which the market was familiar.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. The choice made by students to join the UZ was influenced by the fact that it was fashionable to do so – it was influenced by the decisions of, and pressures from, other students.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree



**5. The UZ used its new found popularity to further entrench itself in the domain of higher education.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**(E). Lock-in**

**1. The UZ became prominent because it took off first.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**2. Over the years students, faculty and administrators developed a deep attachment to UZ thus ensuring that they stuck with the institution.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**3. Once students, faculty and administrators joined the UZ, they became uninterested in joining other institutions of higher learning.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**4. The rise to prominence of the UZ was because its presence helped to reduce uncertainty regarding the provision of higher education.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**5. If another institution of higher education were to be introduced before 1980, it would not have taken off.**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

## **Appendix 7: Questionnaire on Organisational Success**

### **Participant Demographics**

#### **1. Gender**

Male	Female

#### **2. Profession**

	Current	Former
Academic		
Administrator		
Student		

#### **3. When did you join the UCRN/UCR/UR?**

1950-1960	
1960-1970	
1970-1980	

#### **4. Highest level of education**

Doctoral Degree	
Masters Degree	
Bachelors Degree	
High School	

#### **5. Faculty**

Agriculture	
Arts	
Commerce	
Education	
Engineering	
Law	
Medicine	
Science	
Social Studies	
Veterinary Studies	
Administration	

### **How to Answer the Questionnaire**

**For your answers, make use of the Five (5) point Scale which varies from: Strongly Disagree (1), Partially Disagree (2), Neutral (3), Partially Agree (4), Strongly Agree (5) as illustrated below. Please note that the questions cover the period 1953-1980.**

The University was established first as the University College of Rhodesia and Nyasaland (UCRN), then it became the University College of Rhodesia (UCR) after Federation, then the University of Rhodesia (UR) and finally the University of Zimbabwe (UZ)

**1. The UCRN/UCR/UR was a successful and prominent institution of higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. Students at UCRN/UCR/UR were satisfied with their educational experiences at the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. Students at UCRN/UCR/UR achieved high levels of academic growth and development.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**4. Students at UCRN/UCR/UR were well prepared for entry into occupations and advancement in their careers after graduation.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. The UCRN/UCR/UR put sufficient emphasis on non-academic, non-career oriented areas of professional development in their teaching.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**6. The UCRN/UCR/UR Faculty and Administrators were satisfied with their employment at the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**7. The UCRN/UCR/UR put sufficient emphasis on Faculty publications.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**8. The UCRN/UCR/UR put sufficient emphasis on attendance at professional conferences.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**9. The UCRN/UCR/UR put sufficient emphasis on teaching at the 'cutting edge'.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**10. The UCRN/UCR/UR was an open institution which interacted well with its external environment, such as the community and professional service organizations.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**11. Because of its reputation as an institution, the UCRN/UCR/UR was able to attract high quality students.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**12. Because of its reputation as an institution, the UCRN/UCR/UR was able to attract high quality faculty.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**13. Because of its reputation as an institution, the UCRN/UCR/UR was able to attract financial support.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**14. The UCRN/UCR/UR had very good relations with its students.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**15. The UCRN/UCR/UR had very good relations with its faculty.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

## **Appendix 8: Questionnaire on Path Dependency**

### **Participant Demographics**

#### **1. Gender**

Male	Female

#### **2. Profession**

	Current	Former
Academic		
Administrator		
Student		

#### **3. When did you join the UCRN/UCR/UR?**

1950-1960	
1960-1970	
1970-1980	

#### **4. Highest level of education**

Doctoral Degree	
Masters Degree	
Bachelors Degree	
High School	

#### **5. Faculty**

Agriculture	
Arts	
Commerce	
Education	
Engineering	
Law	
Medicine	
Science	
Social Studies	
Veterinary Studies	
Administration	

### **How to Answer the Questionnaire**

**For your answers, make use of the Five (5) point Scale which varies from: Strongly Disagree (1), Partially Disagree (2), Neutral (3), Partially Agree (4), Strongly Agree (5) as illustrated below. Please note that the questions cover the period 1953-1980.**

The University was established first as the University College of Rhodesia and Nyasaland (UCRN), then it became the University College of Rhodesia (UCR) after Federation, then the University of Rhodesia (UR) and finally the University of Zimbabwe (UZ)

#### **(A). Initial Conditions**

**1. The establishment and subsequent rise to prominence of the UCRN/UCR/UR started as a small idea.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. Early developments in the founding of UCRN/UCR/UR had a significant influence on the future success of the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. UCRN/UCR/UR structure, processes, and decisions still bear imprints of its past.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**4. UCRN/UCR/UR was an institution characterised by rationality, formality and order, mixed with intuition, informality and disorder.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. UCRN/UCR/UR was able to find solutions to its problems through experimentation.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**6. UCRN/UCR/UR was able to find solutions to its problems through self-organisation (the ability of an organisation to discover, through experimentation and local interactions, answers to its problems).**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**(B). Increasing Returns**

**1. Students, faculty and administrators were attracted to the UCRN/UCR/UR because of its reputation as an institution of higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. The UCRN/UCR/UR acted as a magnet that attracted complementary organisations and institutions to develop a cluster in the capital city in proximity to the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. As more organisations and institutions developed in the capital city the development of the UCRN/UCR/UR as a successful institution was further boosted.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree



**4. As the UCRN/UCR/UR became more successful as an institution, the development of alternative institutions of higher learning was further suppressed.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. Students at UCRN/UCR/UR enjoyed the prestige of studying at the prominent institution and this narrowed their options only to this institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**6. Faculty at UCRN/UCR/UR enjoyed the prestige of working at the prominent institution and this narrowed their options only to this institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**7. Administrators at UCRN/UCR/UR enjoyed the prestige of working at the prominent institution and this narrowed their options only to this institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**(C). Self-reinforcement**

**1. Prospective students considered the UCRN/UCR/UR the preferred institution among others.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. Other institutions failed to develop in competition with the UCRN/UCR/UR because the latter had established itself as the standard institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. Students derived good benefits from their association with UCRN/UCR/UR.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**4. Faculty derived good benefits from their association with UCRN/UCR/UR.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. Administrators derived good benefits from their association with UCRN/UCR/UR.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**6. Once students joined the UCRN/UCR/UR it became difficult to disengage from the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**7. Once Faculty joined the UCRN/UCR/UR it became difficult to disengage from the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**8. Once Administrators joined the UCRN/UCR/UR it became difficult to disengage from the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**9. The UCRN/UCR/UR capitalized on the initial advantage that it enjoyed as the first institution to be established to continue dominating the market in higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**(D). Positive Feedback**

**1. Organisations, institutions and individuals provided positive feedback to UCRN/UCR/UR's development thus further entrenching it as the institution of choice in the country.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. As more students, faculty and administrators joined the UCRN/UCR/UR, this helped to improve its reputation and prominence as the institution of choice.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. Students, faculty and administrators joined the UCRN/UCR/UR because it was the institution with which the market was familiar.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**4. The choice made by students to join the UCRN/UCR/UR was influenced by the fact that it was fashionable to do so – it was influenced by the decisions of, and pressures from, other students.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. The UCRN/UCR/UR used its new found popularity to further entrench itself in the domain of higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**(E). Lock-in**

**1. The UCRN/UCR/UR became prominent because it took off first.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**2. Over the years students, faculty and administrators developed a deep attachment to UCRN/UCR/UR thus ensuring that they stuck with the institution.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**3. Once students, faculty and administrators joined the UCRN/UCR/UR, they became uninterested in joining other institutions of higher learning.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**4. The rise to prominence of the UCRN/UCR/UR was because its presence helped to reduce uncertainty regarding the provision of higher education.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

**5. If another institution of higher education were to be introduced before 1980, it would not have taken off.**

Strongly Disagree	Partially Disagree	Neutral	Partially Agree	Strongly Agree

University of Cape Town

**Appendix 9: Frequencies for Organisational Success Questionnaire**

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**Frequencies**

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	Cases Used	Statistics are based on all cases with valid data.
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		Statistics			
	Gender	Current profession	Former profession	When did you join UCRN	Highest level of education
N	Valid	80	33	59	80
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**Statistics**

		Faculty	UCRN was successful and prominent	Students were satisfied with UCRN	Students at UCRN achieved high academic growth	Students at UCRN were well prepared for industry
N	Valid	80	80	80	80	80
	Missing	0	0	0	0	0

**Statistics**

		UCRN put sufficient emphasis on non-academic	Staff were happy at UCRN	UCRN put emphasis on faculty publication	UCRN put emphasis on attendance at conferences	UCRN put emphasis on teaching
N	Valid	80	80	80	80	80
	Missing	0	0	0	0	0

**Statistics**

		UCRN interacted well with community	UCRN attracted high quality students	UCRN attracted high quality faculty	UCRN attracted financial support
N	Valid	80	80	80	80
	Missing	0	0	0	0

**Statistics**

		UCRN had very good relation with students	UCRN had very good relation with its faculty
N	Valid	80	80
	Missing	0	0

**Frequency Table**

**Respondents by Sex**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	59	73.8	73.8	73.8
	Female	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

**Respondents by Current Profession**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Academic	29	36.3	87.9	87.9
	Administrator	4	5.0	12.1	100.0
	Total	33	41.3	100.0	
Missing	System	47	58.8		
Total		80	100.0		

**Respondents by Former Profession**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Academic	15	18.8	25.4	25.4
	Administrator	4	5.0	6.8	32.2
	Student	40	50.0	67.8	100.0
	Total	59	73.8	100.0	
Missing	System	21	26.3		
Total		80	100.0		

**When did you Join UR?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1950 – 1959	7	8.8	8.8	8.8
	1960 – 1969	36	45.0	45.0	53.8
	1970 -1979	37	46.3	46.3	100.0
	Total	80	100.0	100.0	

**Highest Level of Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doctoral	31	38.8	38.8	38.8
	Masters	26	32.5	32.5	71.3
	Bachelors	23	28.8	28.8	100.0
	Total	80	100.0	100.0	



**Respondents by Faculty**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agriculture	2	2.5	2.5	2.5
Arts	29	36.3	36.3	38.8
Commerce	5	6.3	6.3	45.0
Education	9	11.3	11.3	56.3
Law	2	2.5	2.5	58.8
Medicine	3	3.8	3.8	62.5
Science	11	13.8	13.8	76.3
Social Studies	12	15.0	15.0	91.3
Administration	7	8.8	8.8	100.0
Total	80	100.0	100.0	

**UR was a Successful and Prominent Institution of Higher Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	2.5	2.5	2.5
Partially Disagree	3	3.8	3.8	6.3
Neutral	2	2.5	2.5	8.8
Partially Agree	15	18.8	18.8	27.5
Strongly Agree	58	72.5	72.5	100.0
Total	80	100.0	100.0	

**Students were Satisfied With Educational Experiences**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	2.5	2.5	2.5
Partially Disagree	1	1.3	1.3	3.8
Neutral	1	1.3	1.3	5.0
Partially Agree	40	50.0	50.0	55.0
Strongly Agree	36	45.0	45.0	100.0
Total	80	100.0	100.0	

**Students Achieved Academic Growth and Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	2.5	2.5	2.5
	Neutral	3	3.8	3.8	6.3
	Partially Agree	22	27.5	27.5	33.8
	Strongly Agree	53	66.3	66.3	100.0
	Total	80	100.0	100.0	

**Students were well Prepared for Careers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	2.5	2.5	2.5
	Partially Disagree	6	7.5	7.5	10.0
	Neutral	10	12.5	12.5	22.5
	Partially Agree	30	37.5	37.5	60.0
	Strongly Agree	32	40.0	40.0	100.0
	Total	80	100.0	100.0	

**UR put Sufficient Emphasis on Non-academic Areas**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	10.0	10.0	10.0
	Partially Disagree	17	21.3	21.3	31.3
	Neutral	31	38.8	38.8	70.0
	Partially Agree	19	23.8	23.8	93.8
	Strongly Agree	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

**Faculty and Administrators were Satisfied with their Employment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	3.8	3.8	3.8
	Partially Disagree	2	2.5	2.5	6.3
	Neutral	20	25.0	25.0	31.3
	Partially Agree	36	45.0	45.0	76.3
	Strongly Agree	19	23.8	23.8	100.0
	Total	80	100.0	100.0	

**UR put Sufficient Emphasis on Faculty Publications**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	2.5	2.5	2.5
	Partially Disagree	7	8.8	8.8	11.3
	Neutral	27	33.8	33.8	45.0
	Partially Agree	27	33.8	33.8	78.8
	Strongly Agree	17	21.3	21.3	100.0
	Total	80	100.0	100.0	

**UR put Sufficient Emphasis on Attendance at Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.3	1.3	1.3
	Partially Disagree	1	1.3	1.3	2.5
	Neutral	28	35.0	35.0	37.5
	Partially Agree	27	33.8	33.8	71.3
	Strongly Agree	23	28.8	28.8	100.0
	Total	80	100.0	100.0	

**UR put Sufficient Emphasis on Teaching**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Partially Disagree	4	5.0	5.0	5.0
	Neutral	13	16.3	16.3	21.3

Partially Agree	40	50.0	50.0	71.3
Strongly Agree	23	28.8	28.8	100.0
Total	80	100.0	100.0	

**UR was an Open Institution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	8	10.0	10.0	10.0
Partially Disagree	14	17.5	17.5	27.5
Neutral	9	11.3	11.3	38.8
Partially Agree	32	40.0	40.0	78.8
Strongly Agree	17	21.3	21.3	100.0
Total	80	100.0	100.0	

**UR was able to Attract High Quality Students**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	3.8	3.8	3.8
Partially Disagree	3	3.8	3.8	7.5
Neutral	8	10.0	10.0	17.5
Partially Agree	22	27.5	27.5	45.0
Strongly Agree	44	55.0	55.0	100.0
Total	80	100.0	100.0	

**UR was able to Attract High Quality Faculty**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	2.5	2.5	2.5
Partially Disagree	4	5.0	5.0	7.5
Neutral	9	11.3	11.3	18.8
Partially Agree	29	36.3	36.3	55.0
Strongly Agree	36	45.0	45.0	100.0
Total	80	100.0	100.0	

**UR was able to Attract Financial Support**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	2.5	2.5	2.5
	Partially Disagree	7	8.8	8.8	11.3
	Neutral	22	27.5	27.5	38.8
	Partially Agree	24	30.0	30.0	68.8
	Strongly Agree	25	31.3	31.3	100.0
	Total	80	100.0	100.0	

**UR had Good Relations with its Students**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	8.8	8.8	8.8
	Partially Disagree	19	23.8	23.8	32.5
	Neutral	12	15.0	15.0	47.5
	Partially Agree	27	33.8	33.8	81.3
	Strongly Agree	15	18.8	18.8	100.0
	Total	80	100.0	100.0	

**UR had Good Relations with its Faculty**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.3	1.3	1.3
	Partially Disagree	8	10.0	10.0	11.3
	Neutral	27	33.8	33.8	45.0
	Partially Agree	31	38.8	38.8	83.8
	Strongly Agree	13	16.3	16.3	100.0
	Total	80	100.0	100.0	

**Appendix 10: Frequencies for Path Dependency Questionnaire**

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FILE='F:\MUTOWO\Path Dependency.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
FREQUENCIES VARIABLES=Q1 Q2.1 Q2.2 Q3 Q4 Q5 A1 A2 A3 A4 A5 A6 B1 B2
B3 B4 B5 B6 B7 C1 C2 C3 C4 C5 C6 C7 C8 C9 D1 D2 D3 D4 D5 E1 E2 E3 E4 E5
/ORDER=ANALYSIS.
```

**Frequencies**

**Frequency Table**

**Respondents by Sex**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	59	73.8	73.8	73.8
	Female	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

**Respondents by Current Profession**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Academic	30	37.5	88.2	88.2
	Administrator	4	5.0	11.8	100.0
	Total	34	42.5	100.0	
Missing	System	46	57.5		
Total		80	100.0		

**Respondents by Former Profession**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Academic	14	17.5	24.1	24.1
	Administrator	4	5.0	6.9	31.0
	Student	40	50.0	69.0	100.0
	Total	58	72.5	100.0	
Missing	System	22	27.5		
Total		80	100.0		

**When did you Join UR?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1950 - 1959	7	8.8	8.8	8.8
1960 - 1969	36	45.0	45.0	53.8
1970-1980	37	46.3	46.3	100.0
Total	80	100.0	100.0	

**Highest Level of Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Doctoral degree	32	40.0	40.0	40.0
Masters Degree	26	32.5	32.5	72.5
Bachelors Degree	22	27.5	27.5	100.0
Total	80	100.0	100.0	

**Respondents by Faculty**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agriculture	2	2.5	2.5	2.5
Arts	29	36.3	36.3	38.8
Commerce	5	6.3	6.3	45.0
Education	9	11.3	11.3	56.3
Law	2	2.5	2.5	58.8
Medicine	3	3.8	3.8	62.5
Science	11	13.8	13.8	76.3
Social Studies	12	15.0	15.0	91.3
Administration	7	8.8	8.8	100.0
Total	80	100.0	100.0	

**Rise to Prominence of UR Started as a Small Idea**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	10	12.5	12.5	12.5

Partially Disagree	9	11.3	11.3	23.8
Neutral	24	30.0	30.0	53.8
Partially Agree	18	22.5	22.5	76.3
Strongly Agree	19	23.8	23.8	100.0
Total	80	100.0	100.0	

**Early Developments had Influence on Future Success of UR**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	1.3	1.3	1.3
Partially Disagree	1	1.3	1.3	2.5
Neutral	10	12.5	12.5	15.0
Partially Agree	29	36.3	36.3	51.3
Strongly Agree	39	48.8	48.8	100.0
Total	80	100.0	100.0	

**UR Structure and Processes Bear Imprints of its Past**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	4	5.0	5.0	5.0
Partially Disagree	5	6.3	6.3	11.3
Neutral	13	16.3	16.3	27.5
Partially Agree	39	48.8	48.8	76.3
Strongly Agree	19	23.8	23.8	100.0
Total	80	100.0	100.0	

**UR was Characterised by Rationality and Disorder**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	3.8	3.8	3.8
Partially Disagree	5	6.3	6.3	10.0
Neutral	28	35.0	35.0	45.0
Partially Agree	31	38.8	38.8	83.8
Strongly Agree	13	16.3	16.3	100.0
Total	80	100.0	100.0	



**UR was able to find Solutions through Experimentation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	7.5	7.5	7.5
	Partially Disagree	7	8.8	8.8	16.3
	Neutral	27	33.8	33.8	50.0
	Partially Agree	30	37.5	37.5	87.5
	Strongly Agree	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

**UR was able to find Solutions through Self-organisation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	5.0	5.0	5.0
	Partially Disagree	6	7.5	7.5	12.5
	Neutral	22	27.5	27.5	40.0
	Partially Agree	32	40.0	40.0	80.0
	Strongly Agree	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

**UR's Reputation Attracted Students, Faculty & Administrators**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.3	1.3	1.3
	Partially Disagree	3	3.8	3.8	5.0
	Neutral	3	3.8	3.8	8.8
	Partially Agree	30	37.5	37.5	46.3
	Strongly Agree	43	53.8	53.8	100.0
	Total	80	100.0	100.0	

**UR Attracted Complementary Organisations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	10.0	10.0	10.0
	Partially Disagree	9	11.3	11.3	21.3
	Neutral	31	38.8	38.8	60.0
	Partially Agree	18	22.5	22.5	82.5
	Strongly Agree	14	17.5	17.5	100.0
	Total	80	100.0	100.0	

**Developments in the City Boosted the Growth of UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	7.5	7.5	7.5
	Partially Disagree	4	5.0	5.0	12.5
	Neutral	20	25.0	25.0	37.5
	Partially Agree	28	35.0	35.0	72.5
	Strongly Agree	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

**UR Suppressed the Development of other Institutions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	22.5	22.5	22.5
	Partially Disagree	12	15.0	15.0	37.5
	Neutral	13	16.3	16.3	53.8
	Partially Agree	27	33.8	33.8	87.5
	Strongly Agree	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

**Students Enjoyed the Prestige of Studying at UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	7.5	7.5	7.5
	Partially Disagree	8	10.0	10.0	17.5
	Neutral	15	18.8	18.8	36.3
	Partially Agree	35	43.8	43.8	80.0
	Strongly Agree	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

**Faculty Enjoyed the Prestige of Working at UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	9	11.3	11.3	11.3
	Partially Disagree	10	12.5	12.5	23.8
	Neutral	24	30.0	30.0	53.8
	Partially Agree	26	32.5	32.5	86.3
	Strongly Agree	11	13.8	13.8	100.0
	Total	80	100.0	100.0	

**Administrators Enjoyed the Prestige of Working at UCRN**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	5.0	5.0	5.0
	Partially Disagree	13	16.3	16.3	21.3
	Neutral	28	35.0	35.0	56.3
	Partially Agree	21	26.3	26.3	82.5
	Strongly Agree	14	17.5	17.5	100.0
	Total	80	100.0	100.0	

**Students Considered UR the Preferred Institution**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	6.3	6.3	6.3
	Partially Disagree	7	8.8	8.8	15.0
	Neutral	15	18.8	18.8	33.8
	Partially Agree	27	33.8	33.8	67.5
	Strongly Agree	26	32.5	32.5	100.0
	Total	80	100.0	100.0	

**Other Institutions Failed to Compete with UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	15.0	15.0	15.0
	Partially Disagree	16	20.0	20.0	35.0
	Neutral	11	13.8	13.8	48.8
	Partially Agree	22	27.5	27.5	76.3
	Strongly Agree	19	23.8	23.8	100.0
	Total	80	100.0	100.0	

**Students Derived Benefits from Associating with UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Partially Disagree	2	2.5	2.5	2.5
	Neutral	7	8.8	8.8	11.3
	Partially Agree	42	52.5	52.5	63.8
	Strongly Agree	29	36.3	36.3	100.0
	Total	80	100.0	100.0	

**Faculty Derived Benefits from Associating with UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	15	18.8	18.8	18.8
	Partially Agree	37	46.3	46.3	65.0
	Strongly Agree	28	35.0	35.0	100.0
	Total	80	100.0	100.0	

**Administrators Derived Benefits from Associating with UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Partially Disagree	1	1.3	1.3	1.3
	Neutral	21	26.3	26.3	27.5
	Partially Agree	38	47.5	47.5	75.0
	Strongly Agree	20	25.0	25.0	100.0
	Total	80	100.0	100.0	

**Students found it Difficult to Disengage from UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	17.5	17.5	17.5
	Partially Disagree	8	10.0	10.0	27.5
	Neutral	20	25.0	25.0	52.5
	Partially Agree	25	31.3	31.3	83.8
	Strongly Agree	13	16.3	16.3	100.0
	Total	80	100.0	100.0	

**Faculty found it Difficult to Disengage from UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	13.8	13.8	13.8
	Partially Disagree	9	11.3	11.3	25.0
	Neutral	27	33.8	33.8	58.8
	Partially Agree	23	28.8	28.8	87.5
	Strongly Agree	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

**Administrators found it Difficult to Disengage from UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	15.0	15.0	15.0
	Partially Disagree	10	12.5	12.5	27.5
	Neutral	27	33.8	33.8	61.3

Partially Agree	24	30.0	30.0	91.3
Strongly Agree	7	8.8	8.8	100.0
Total	80	100.0	100.0	

**UR Capitalised on the Initial Advantage to Dominate the Market**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	2.5	2.5	2.5
Partially Disagree	6	7.5	7.5	10.0
Neutral	6	7.5	7.5	17.5
Partially Agree	28	35.0	35.0	52.5
Strongly Agree	38	47.5	47.5	100.0
Total	80	100.0	100.0	

**Organisations Provided Feedback to UR**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	3.8	3.8	3.8
Partially Disagree	6	7.5	7.5	11.3
Neutral	17	21.3	21.3	32.5
Partially Agree	33	41.3	41.3	73.8
Strongly Agree	21	26.3	26.3	100.0
Total	80	100.0	100.0	

**UR's Reputation was Improved as Stakeholders Joined**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Partially Disagree	3	3.8	3.8	3.8
Neutral	14	17.5	17.5	21.3
Partially Agree	34	42.5	42.5	63.8
Strongly Agree	29	36.3	36.3	100.0
Total	80	100.0	100.0	

**The Market was Familiar with UR**

	Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	Strongly Disagree	1	1.3	1.3	1.3
	Partially Disagree	7	8.8	8.8	10.0
	Neutral	7	8.8	8.8	18.8
	Partially Agree	41	51.3	51.3	70.0
	Strongly Agree	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

**It was Fashionable to Join UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	13.8	13.8	13.8
	Partially Disagree	7	8.8	8.8	22.5
	Neutral	22	27.5	27.5	50.0
	Partially Agree	28	35.0	35.0	85.0
	Strongly Agree	12	15.0	15.0	100.0
	Total	80	100.0	100.0	

**UR's Popularity enhanced its Dominance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	8.8	8.8	8.8
	Partially Disagree	5	6.3	6.3	15.0
	Neutral	13	16.3	16.3	31.3
	Partially Agree	31	38.8	38.8	70.0
	Strongly Agree	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

**UR became Prominent because it took off First**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	2.5	2.5	2.5
	Partially Disagree	4	5.0	5.0	7.5
	Neutral	6	7.5	7.5	15.0
	Partially Agree	25	31.3	31.3	46.3
	Strongly Agree	43	53.8	53.8	100.0

**It was Fashionable to Join UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	13.8	13.8	13.8
	Partially Disagree	7	8.8	8.8	22.5
	Neutral	22	27.5	27.5	50.0
	Partially Agree	28	35.0	35.0	85.0
	Strongly Agree	12	15.0	15.0	100.0
Total		80	100.0	100.0	

**Stakeholders Developed an Attachment to UR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	5.0	5.0	5.0
	Partially Disagree	6	7.5	7.5	12.5
	Neutral	16	20.0	20.0	32.5
	Partially Agree	36	45.0	45.0	77.5
	Strongly Agree	18	22.5	22.5	100.0
Total		80	100.0	100.0	

**Stakeholders were Uninterested in Joining Other Institutions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	12.5	12.5	12.5
	Partially Disagree	17	21.3	21.3	33.8
	Neutral	20	25.0	25.0	58.8
	Partially Agree	25	31.3	31.3	90.0
	Strongly Agree	8	10.0	10.0	100.0
Total		80	100.0	100.0	

**UR's Prominence Helped to Reduce Uncertainty**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Partially Disagree	4	5.0	5.0	5.0
	Neutral	11	13.8	13.8	18.8
	Partially Agree	42	52.5	52.5	71.3



Strongly Agree	23	28.8	28.8	100.0
Total	80	100.0	100.0	

**Other Institutions would not have Taken off**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	22	27.5	27.5	27.5
Partially Disagree	13	16.3	16.3	43.8
Neutral	17	21.3	21.3	65.0
Partially Agree	15	18.8	18.8	83.8
Strongly Agree	13	16.3	16.3	100.0
Total	80	100.0	100.0	

University of Cape Town

**Appendix 11: Photographs of Some of the Interviewees and Respondents**





































20 7114 3128  
Modern African Poetry  
(Sue Wood)

African is about...  
light into dark, phantasmic  
the pure empirical process  
of the mind  
adding numerals  
with the world  
and literature  
throughout



Bulletin board with several papers and photos pinned to it.





**KAYMO FABRICS**

2010

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Jan																																
Feb																																
Mar																																
Apr																																
May																																
Jun																																
Jul																																
Aug																																
Sep																																
Oct																																
Nov																																
Dec																																



































Good for life



nal  
normalised  
structures and  
values deepening

Community

Formal

Behind  
CULTURAL, HISTORICAL,  
ETHICAL, PRACTICES  
and ideologies

Formal institutions  
such as law  
politics and other  
structures

Environmental change



NOTICE

...

NOTICE

...



2010















There's no life  
before COFFEE!

COFFEE

















...mission  
- Study - looked rewards had  
+ yielded for you in  
the context of your mind  
... times  
... Liberman  
... about his  
... styles?  
... in political geography  
... from history?



Feb - 19-11-2







