THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANISATIONAL PERFORMANCE IN THE MANUFACTURING SECTOR OF THE BEER INDUSTRY IN SOUTH AFRICA

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ABSTRACT

Human resources can provide a competitive advantage due to the fact that it is valuable, rare, imperfectly imitable and has no substitutes. Competitors can duplicate competitive advantage obtained via better technology and products but it is difficult to duplicate competitive advantage that is created through improved management of people.

The motivation for the research was to establish whether there was a casual relationship between HR practices and organisational effectiveness and between organisational effectiveness and manufacturing performance. The research also developed a model that could be implemented to enhance business performance. Secondary data formed the primary source of information to obtain business performance indicators and information on the HR practices.

While the results indicated that there was no directional relationship between HR practices and business performance indicators, findings of the research provide statistical evidence that investment in HR practices of the organisation will have a positive relationship with business performance.

Among the HR practices, performance appraisals and career development has a direct casual relationship with the customer satisfaction perspective. The research can be used within the organisation and as a basis for further academic research.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Masters of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University.

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1.1   Introduction

There is rapid change in the business environment due to political, economic, technological and environmental factors. This requires organisations to compete on numerous fronts. Chang and Huang (2005, p. 434) state that 'to compete effectively, firms must constantly improve their performance by reducing costs, enhancing quality and differentiating their products and services.' A consensus has emerged among scholars and practitioners alike that the business environment has become more competitive than in the past because of globalisation (Khatri, 2000). Khatri (2000) goes onto to say that businesses need to focus even harder on their competitive strengths so as to develop appropriate long term strategies.

1.1.1 Human Resources as a competitive advantage

Human resources can provide a competitive advantage due to the fact that it is valuable, rare, imperfectly imitable and has no substitutes. Competitors can duplicate competitive advantage obtained via better technology and products but it is difficult to duplicate competitive advantage that is created through improved management of people. Khandekar and Sharma (2005) believe that if companies are to survive and thrive in the global economy they require world class human

resource competencies and processes for managing them. A critical mass of employees needs to be developed who are knowledgeable or skilled in a particular technology. This can provide a potential source of competitive advantage.

Huselid (1995) states that human resources management practices can help to create a source of sustained competitive advantage. It has to however be linked with the firm's competitive strategy. Huselid (1995) further goes on to say that human resource practices can significantly contribute to firm performance if they are properly configured. The rationale behind the argument is that effective HRM practices which exploit synergies among such practices and help the organisation to implement its competitive strategy provide a source of sustained competitive advantage.

Huselid, Jackson and Schuler (1997) further identified strategic human resources practices which can contribute to organisational objectives. They emphasise that these should be internally consistent practices. They also state that a firm can gain competitive advantage if a firm ensures that it's employees add value to it's processes and that it's human capital is unique and difficult to replicate. Human resource practices can comprise many different activities through which the firm can create human capital that meets these competitive advantages. Their study has also shown that in order to achieve a competitive advantage the HRM practices must not merely be institutionalised

activities but rather HRM practices that have an increased effectiveness by making improvements within the domain of strategic HRM activities. This will lead to a potential source of competitive advantage.

Huselid and Becker (1996) state that due to the changing product market and organisational structures, HRM practices are increasingly taking on a strategic role to provide a motivated and flexible workforce that can meet the new market imperatives. These give the organisation a competitive advantage as traditional sources of competitive advantage e.g. technology, quality, economies of scale, become easier to imitate. HRM practices also play a key role in the development of core competencies which can ultimately become a potential source of competitive advantage.

Providing the firm with a competitive advantage is perhaps the first step. This ultimately needs to lead to improved organisational performance. Huang (2000) argues that the emphasis is on linking human resources management practices to strategy, so as to increase organisational competitiveness and effectiveness. In doing so the assumption is that by linking HRM practices to strategy it will have a positive impact on personnel costs, employee productivity and development of management resources. These will ultimately enhance a firm's performance.

Previous studies have examined human resources practices, organisational climate and organisational effectiveness as a means of

enhancing organisational performance (Tzafrir, 2005; Stroh and Caligiuri, 1998; Richard and Johnson, 2001; Neal, West and Patterson, 2005). The underlying assumption is that human resource management practices impacts on personnel costs, employee productivity and development of management resources. These effects subsequently help to enhance a firm's performance (Huang, 2000). Guest (1997) proposes 5 forms of human resource management fit that leads to superior performance. These include fit as a strategic interaction, fit as contingency, fit as an ideal set of practices, fit as gestalt and fit as bundles.

Previous studies have shown that human resources management (HRM) practices does have a positive influence on organisational performance (Tzafrir, 2005; Stroh and Caligiuri, 1998; Richard and Johnson, 2001; Neal *et al*, 2005). There are numerous HRM practices, however the difficulty lies in understanding those dimensions that have the most positive impact on business performance. This research aims to investigate those HRM practices that have a positive or significant relation to organisational performance within the manufacturing departments of the South African Breweries Limited (SAB).

1.2   Aim of the Research

The research aims to achieve the following:

1. To identify HRM practices that can influence business performance.

2. To define business performance and more specifically the performance indicators that is used in the industry in question.

3. To determine if there is a relationship between HRM practices and business performance indicators.

4. To formulate recommendations regarding HRM practices and business performance indicators using a conceptual model.

1.3   Purpose of the Research

There is a growing body of evidence that supports an association between high performance human resource management and various organisational performance measures (Guest, 1997). There is growing belief that for companies to survive and thrive in the global economy, they require world-class human resource competencies (Khandekar and Sharma, 2005). The question thus arises as to which HRM practices lead to enhanced business performance. Marchington and Grugulis (2000) argue that a particular set of human resource practices can increase company profits. They further elaborate that the impact is more pronounced when complimentary groups or bundles of HRM practices are used together.

The following research will be conducted in the manufacturing division of the South African Breweries Limited. Currently the manufacturing division consistently lags the sales and distribution division with regards to business performance indicators and HRM practices, as measured by the organisation on an annual basis. The motivation for the research is to develop a model in order to identify groups or bundles of HRM practices that should be implemented within the manufacturing division to enhance business performance.

1.4 The Liquor and Beer Industry in South Africa

The liquor industry has changed significantly over the last 2 years, with mergers and insolvencies taking place and consequently dominance within the industry has become obvious (Research report on the liquor industry, 2004). Due to the dominance in the industry by a few companies, the government wishes to implement a new Liquor Bill to encourage employment and address the dominance within the industry.

1.4.1 State of the Industry

The liquor industry comprises of three main markets namely spirits, wine and beer. The beer industry is further made up of the clear beer market and sorghum beer market. The study focuses on the clear beer market. The South African liquor industry has experienced a period of consolidation arising in part from a polarisation in which the larger

players become more powerful and the smaller players struggle to survive. The branded spirits market is dominated by Distell and Guinness UDV.

The wine sector is much more fragmented and includes companies such as Winecorp, The Really Great Brand Company, Vinimark, Meridian, Stellenbosch Vineyards and the New World Wine Agencies. The local wine farms, many of which have enjoyed good times since the mid 1990s, are now experiencing financial difficulties due to currency fluctuations and international markets which seek cheaper product.

The beer sector of the industry is dominated by The South African Breweries. The growth in presence however of Namibian Breweries' brands in the premium sector of the domestic market shows that SAB's virtual monopoly is being eroded. However it is fair to say that there was little opportunity for other players to threaten SAB's domination of the beer industry. A key development has taken place in March 2007 when SAB's licence to brew a premium brand was terminated. This means that SAB for the first time will experience competition from a global competitor.

There are also microbreweries that operate in the current industry (Research report on the liquor industry, 2004). As at February 2005, 18 microbreweries have been realised in the country, producing beer on a commercial basis. It is also acknowledged that there are hundreds if not

thousands of microbrewers who brew mainly for their own consumption. The total volume of all the microbreweries is estimated to be 45 000 hectolitres per year. Most microbrewers are owned by individuals.

Competition within the liquor industry has become increasingly uncompetitive. Mergers and consolidations in the branded spirit market, the ongoing domination of the beer market by SAB, the financial pressure on some of the mid-size wine industry players (notably Winecorp and Stellenbosch Vineyards), and the consolidation within the small distributor business have all reduced the number of key players performing adequately in the South African market.

Having described the landscape of the liquor industry, the study focuses on SAB due to it's dominance within the industry.

1.5 Organisational Background

SABMiller plc is an international brewer with deep roots and rich heritage in South Africa. It is the second largest brewer in the world by volume. The company has interests in more than 60 countries, producing over 180 different brands. South African Breweries Limited (SAB) is the South African operations of the group. It employs about 9000 people and contributes significantly to the development of skills among stakeholders.

To ensure international competitiveness, in accordance with the vision of the company, there are two core issues that come to light. Firstly, cost effective processes that are continuously being improved and secondly, the creativeness of the workforce, with a high level of trust. The strive to being world class holds the advantage of being able to compete globally, growing market share and expanding operations.

World-class competitiveness is determined by an organisations ability to satisfy its customers' needs better, faster and cheaper than its competitors. This requires high and continuously improving levels of quality, speed and cost effectiveness. To achieve high and continuous improvement of quality, speed and cost effectiveness requires competent and committed people including competent leaders as well as continuous analysis and improvement of all processes. Committed and developed people and the continuous improvement of processes are the results of good HRM practices.

HRM practices are core to the various business processes e.g. employee development is a corporate value where the company works to create an environment for individuals and teams to develop their full potential for the benefit of themselves and the company. People are seen as a core theme underpinning the company's vision. It is committed to the development of people and creating a work culture, which is satisfying and fulfilling. In order to achieve this sound HRM practices need to be implemented within the organisation.

The company practices what is termed 'six pack' HRM practices as indicated in Figure 1 below.

Figure 1: SAB HRM practices alignment model

STRATEGIC INTENT
Provide pro-active support to business unit initiatives through strategic alignment with initiatives and tailored responses
Play a pre-emptive role in forecasting future people trends and needs, to guide the business' people needs with minimum disruption

Strategic Partnering

HR's must play a role in optimizing growth by providing a framework and toolbox for creating and sustaining a performance driven culture

Business Partnering

Human Capital Competitiveness

High Performance Culture

Functional Excellence

SAB Ltd's success is its ability to attract, retain and develop high calibre people who ensure that all strategic and operational goals are delivered. HR must ensure SAB's human capital competitiveness.

If HR is to be a true business partner then it needs to ensure that the HR practices, processes and outputs meet line's needs and international best practice

The key aspect of the model is that apart from HR performing it's core function of ensuring that HRM practices, processes and outputs meet line's needs and international best practices, they also need to provide a strategic support. This takes the form of proactively supporting the various lines functions through strategic alignment, forecasting of future trends and providing a framework that ensures a performance driven culture.

1.6 Summary

Chapter 1 concluded the aim and the purpose of the research as well as the organisation at which the research will be conducted.

Chapter 2 will focus on the literature review of HRM practices as well as the linkage with business performance.

Chapter 3 will focus on the research questions and the hypotheses.

Chapter 4 will thereafter include the research methodology and data collection to be used in the research.

Chapter 5 and 6 will focus on the findings of the research and the discussion of the results respectively.

Chapter 7 will conclude the research with the recommendations for future research and limitations of the study.

CHAPTER 2:   LITERATURE REVIEW

Chapter 2 will focus on the theory with regards to human resources management (HRM) practices and the literature review thereof.

2.1   Human Resource Management (HRM) Practices

Previous studies have examined the relationship between HRM practices and firm performance. The underlying assumption is that firm performance is influenced by human resources practices. The assumption has been supported by evidence of previous studies (Huselid, 1995; Chang and Huang, 2003; Khatri, 2000; Park, Mitsuhashi, Fey and Bjorkman, (2003). Guest (1997) further indicates that good fit between the HRM practices within the context of the organisation will lead to superior performance.

The approach to human resource management involves the designing and implementing of a set of internally consistent policies and practices that ensure a firm's human capital contributes to the achievement of it's business objectives (Huselid, Jackson and Schuler, 1997). Human capital can be defined as employee's collective knowledge, skills and abilities.

2.1.1 Theories of HRM

There are 3 theories of HRM practices namely strategic theories, descriptive theories and normative theories. The strategic perspective deals with the relationship between a range of possible external contingencies and HRM practices (Guest, 1997). The primary aim in this theory is the impact of environmental influences on HRM practices. The descriptive theories try to describe HRM practices in a comprehensive way. The idea is to capture the broad field and address some of the interrelationships. The normative theory is more prescriptive and reflects the view that there exists sufficient knowledge to prescribe a set of best practices. This theory further states that if integrated HRM practices are applied to achieve goals of high commitment, quality and flexibility, then higher work performance will be the result. This will have a positive impact on organisational performance (Guest, 1997).

The strategic and descriptive theories do not provide much insight into how HRM practices translates into high performance. They view HRM as part of a system comprising many systems and suggest that, when the various subsystems including the HRM sub-system are aligned and supporting each other, superior performance is likely (Guest, 1997).

The normative approach assumes that 'appropriate' HRM practices tap the motivation and commitment of employees. The factors that constitute 'appropriate' practices are derived from the specific theories of

organisational commitment, job design and goal setting. The key aspects of the normative approach are that HRM provides a coherent integration of these behavioural theories and also explain the linkages between practices and performance. An example is the expectancy theory of motivation which provides one possible basis for developing the link between HRM practices and performance. It proposes that high performance, at the individual level, depends on high motivation plus possession of the necessary skills and abilities and an appropriate role and understanding of that role.

The normative approach to HRM practices that encourage high skills and abilities, for example careful selection and high investment in training; high motivation, for example employee involvement and possibly performance-related pay; and an appropriate role structure and role perception, for example job design and extensive communication and feedback.

Although the theories that are presented above differ in how they impact business performance, the end result is that there is a relationship between HRM practices and business performance be it directly or indirectly. The literature discussion that follows discusses some of the studies that used the above mentioned theories to show a link between HRM practices and business performance.

Guest (1997) proposed a model that linked HRM practices to performance and financial outcomes as indicated in Table 1. Guest (1997) elaborates that only when all 3 HRM outcomes are achieved can there be behaviour change which will ultimately lead to higher performance.

Whereas the model indicates a path of how HRM practices influence firm performance, however the influence of other variables which could weaken the impact of HRM outcomes on firm performance needs to be considered.

Table 1: Linking HRM and Firm Performance (Guest, 1997)

HRM Strategy	*HRM Practices*	*HRM Outcomes*	*Behaviour Outcomes*	*Performance Outcomes*	*Financial Outcomes*
Differentiation (Innovation)	Selection		Effort/Motivation	High: Productivity Quality Innovation	Profits
Focus (Quality)	Training Appraisal	Commitment	Cooperation	Low:	
Cost (Cost Reduction)	Rewards Job Design	Quality	Involvement	Absence Labour Turnover Conflict	ROI
	Involvement Status and security	Flexibility	Organisational citizenship	Customer complaints	

2.1.2 HRM and Organisational Fit

The concept of HRM practices and specifically which HRM practices should be adopted by an organisation brings the concept of 'fit' into question. Guest (1997) proposed the model as shown in Table 2 which identifies four types of approaches that an organisation can adopt in identifying the HRM practices that can be implemented.

Table 2: Forms of HRM fit (Guest, 1997)

	Criterion specific	*Criterion free*
Internal	Fit to an ideal set of practices	Fit as gestalt Fit as 'bundles'
External	Fit as strategic interaction	Fit as contingency

Fit as strategic interaction seeks to link HRM practices to the external context and reflects the standard strategic approach (Guest, 1997). A key point is that there is a choice about how to respond to and interact with the environment. Once that choice has been made, then HR strategy and practice must match it. Those organisations with the appropriate response and the right match will show superior performance.

Fit as contingency. This is the more traditional contingency approach, suggesting that those organisations whose HR policies and practice is more responsive to external factors will report superior performance

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(Guest, 1997). These external factors may include the nature of the market, legislative changes or features of the specific sector. This approach tends to assume that a particular response will always be superior, but it does not specify the type of response or any class of responses.

Fit as an ideal set of practices implies that there exists a set of 'best HRM practices (Guest, 1997). An example of this might be the list presented by Pfeffer's (1995) where he described 14 practices. This approach assumes that organisations who are closer to the ideal type of practices will report higher performance.

Fit as gestalt implies that the key to effective HRM lies in finding an appropriate combination of practices (Guest, 1997). This may be due to the synergies gained from a combination of practices or it may be the specific design or culture which builds and brings them together. This element can provide organisations with an HR-based source of competitive advantage. When measuring the impact of HRM practices on performance one needs to take into account all HRM practices and not specific practices as the measurement of a single HRM practice against firm performance may distort results.

Fit as 'bundles' implies the existence of distinctive patterns or configurations referred to as 'bundles' of practices and the key is to determine which are the most effective (Guest, 1997). There may be a

number of possible combinations or configurations of practices which will lead to high performance. Some organisations may emphasize job security as the building block; others prefer training and development. The other practices fit around these.

The above model provides a good framework to classify HRM practices and their impact on organisational performance however the type of 'fit' used in an organisation needs to be identified prior to the measurement of performance indicators.

2.1.3 Identifying HRM Practices

The resource based view of the firm indicates that the firm could develop sustained competitive advantage through creating value that is rare and difficult for competitors to imitate. These resources must meet four requirements in order to provide a competitive advantage. They need to firstly, add value to the production processes through individual performance and secondly, the skills that the organisation requires must be rare.

The third requirement is for the combined human capital that the firms' employees represent cannot be easily imitated and finally the firm's human resources must not be subject to replacement by technology or other substitutes if they are to provide a competitive advantage. Human resource practices play an important role in achieving these

requirements through their influence over employee skills, motivation, and organisational structures that provide employees with the ability to control how their roles are performed (Huselid, 1995).

Huselid (1995) further explains how HRM practices can influence firm performance. HRM practices influence employee skills through the development of human capital. Recruitment procedures together with valid and reliable selection procedures provide a pool of talented new employees who possess different skills. Training and development can further improve employee skills.

Coupled with ensuring that employees have the required skills, they need to be motivated to perform. HRM practices can affect employee motivation by encouraging them to work harder and smarter. Examples of such practices include performance appraisals that assess individual and group performance and then linking these performances to compensation systems and promotions. These practices can ensure that employees perform above their maximum effort thus providing returns in excess of any relevant costs thus leading to enhanced firm performance. If HRM practices increase employee discretionary effort one can expect an influence on turnover, productivity and corporate financial performance (Huselid, 1995).

Employee participation, empowerment and job redesign coupled with extensive training, performance appraisals and compensation systems

can improve organisation performance (Delaney and Huselid, 1996). They propose that HRM practices should be focussed on improving the skills of current and new employees, ensuring that only the best are recruited and providing comprehensive training. This coupled with HRM practices that motivate employees via remuneration and compensation will lead to beneficial organisational performance. The results of their study showed that HRM practices of selectivity in staffing, training and incentive compensation are positively related to organisational performance.

HR forms an invisible asset that creates value when it is embedded in the operational system that enables the organisation to deal with changes in the environment (Chang and Huang, 2003). Neal *et al* (2005) argues that traditional sources of competitive advantage namely technology and capital are becoming less effective as they are more readily available and easier to imitate. Human capital provides an asset that can be used as a competitive advantage as it is much more difficult to copy. Organisations use HRM practices and systems to acquire and develop this capital (Neal *et al* 2005).
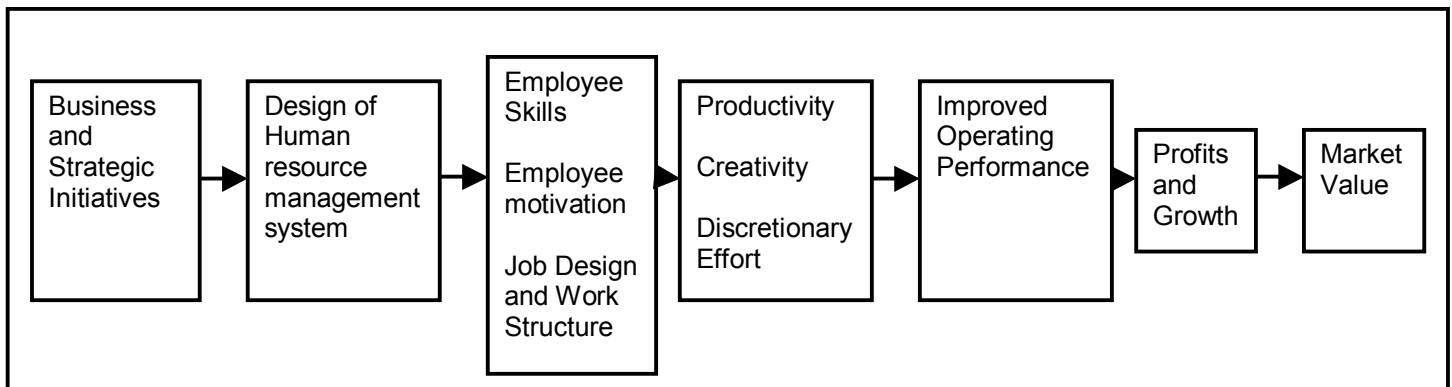
Pfeffer in Marchington and Grugulis (2000) identifies seven practices of successful organisations. These include employment security, selective hiring, self-managed teams/teamworking, high compensation contingent on organisational performance, extensive training, reduction of status differences and sharing information. He argues that these practices can

increase company profits. These were reduced from his original 14 practices which included selective hiring, high pay, pay-performance linkages, employees' ownership, information sharing, empowerment, team structures, internal promotion.

Park *et al* (2003) proposed a bundle of HRM practices that lead to higher levels of employee skills, attitudes and motivation. This in turn leads to higher organisational performance. Some of the practices that they identified were performance-based compensation, task preparation, training and development as well as employee socialising systems. They further indicated that there needs to be a strategic fit between the HRM practices and business strategy in order to ensure improved performance.

In describing the impact of high performance work systems on firm performance, Huselid and Becker (1998) identified HRM practices that could be internally consistent but externally aligned with the firm's strategy. These include rigorous recruitment and selection, performance contingent incentive compensation systems, management development and training linked to business needs and significant employee involvement. In doing so Huselid and Becker (1998) developed a model that linked HR to shareholder value as shown in Figure 2.

Figure 2: Model for the HR-shareholder value relationship

(Becker and Huselid, 1998)

| Business and Strategic Initiatives | → | Design of Human resource management system | → | Employee Skills

Employee motivation

Job Design and Work Structure | → | Productivity

Creativity

Discretionary Effort | → | Improved Operating Performance | → | Profits and Growth | → | Market Value |

While the model shows a clear relationship between HRM practices, firm performance and shareholder value, it is simplistic in that it does not show the effects of other intervening variables.

Paul and Anantharaman (2003) identified 9 HRM practices that impacted on organisational performance indirectly through one or more intervening variables. The HRM practices that they identified were selection, induction, training, job design, work environment, performance appraisal, compensation, career development and incentives. Apart from just identifying HRM practices one has to ensure the processes in implementing them are effective.

Huang (2000) showed in his study of Taiwanese firms that companies that performed better than others were more likely to formulate their HR policies through explicit and formal planning procedures and tend to look at long term issues. The HRM practices that he identified were staffing

(recruitment), performance appraisal, compensation and training and development. Huang (2000) concluded that there was a positive relationship between firms that performed well and the above mentioned HRM practices.

The literature above indicates that studies have identified numerous HRM practices that can be used by organisations to ensure improved business performance, however there has to be an organisational fit of these practices.

2.2 Schools of HRM Practices

Chang and Huang (2005, p. 435) state 'A critical unresolved debate involved whether a universally superior approach existed for managing human resources.' While some believed that a universal approach is possible, others argue that the effectiveness of HRM practices are dependant on the organisational environment and environmental context. The relationship between HRM practices and organisational performance is dominated by the two different schools of thought namely universal or contingent.

Stroh and Caligiuri (1998) argued that those who favour the best practices approach believe that there are a distinct set of practices that, when implemented will lead to greater organisational effectiveness. The contingency theorists on the other hand argue that HRM practices should

be designed in response to such organisational and environmental factors as the economic status of the industry, maturity of the market and technological considerations.

There are clearly two dominant schools of thought with regards to HRM practices. It is possible that the universalistic approach maybe more valuable in explaining guiding principles of HRM practices while specific policies and procedures supporting the guiding principles maybe dependant on the specific situation. These will be dealt with in greater details in the next sections.

2.2.1 Universalistic Perspective

The researchers and scholars of the universalistic school are micro analytical and believe that some HRM practices are always better than others and that it should be adopted by all organisations (Khatri, 2000). The universal perspective implies that there is a direct relationship between several HRM practices and organisational performance (Delery and Doty, 1996). Huselid (1995) proposes the best practices view and proposes that certain types of HRM practices are more effective that others.

The universal resources management practice would influence organisational performance irrespective of other external and internal organisational factors (Tzafrir, 2005). The underlying assumption in the

universalistic perspective is that HRM practices directly or indirectly benefits companies because it changes the passivity into initiative, transmits organisational goals and encourages the involvement of employees. Tzafrir (2005) identified 8 HRM practices which included grievance procedure, incentive compensation, participation, promotion from within, recruitment, selection, internal labour market and training Marchington and Grugulis (2000) state that 'best practice' HRM practices is capable of being used in any organisation, irrespective of product-market situation, industry or workforce. The seven best practices that were presented and used by Pfeffer (1998) in Marchington and Grugulis (2000) are elaborated below:

Employment Security. This is fundamental to underpinning the remainder of the HRM practices due to the fact that in order to get employees to offer their ideas, hard work and commitment, the organisation needs to offer them some security.

Selective Hiring. This involves the effective way in which an organisation achieves human capital advantage. It means that the organisation must recruit and retain a pool of talented individuals. The key attributes are trainability and commitment.

Self-managed teams/teamworking. This practice involves ways of pooling ideas and improving work processes. It can lead to better decision making and the achievement of more creative solutions.

High compensation contingent on organisational performance. This comprises higher than average compensation and performance related reward. These should send the message to employees that they should be rewarded for superior performance. This means that the organisation needs to reward employees at a rate that is comparably higher than the market in order to attract and retain high-quality employees.

Extensive training. This practice involves ensuring that current employees as well as new recruits are trained so that they can not only perform their tasks but also ensure that they remain at the forefront of professional expertise and product knowledge. Training and development has been one of the most common HRM practices that have been identified in most studies that have been done on HRM practices and firm performance.

Reduction in status differences. This aspect refers to the organisation sending a message to all employees, blue collar and knowledge workers that they are all valuable assets who deserve to be treated in a similar way. This also allows employees to bring ideas forward and discuss them in open forums.

Sharing information. This allows employees to understand and discuss issues pertaining to the business. This includes strategic,

financial and operational issues which ensure that employees hear the information from managers and not the grapevine. If teamwork is to succeed and be encouraged, employees should have information at their disposal.

Tzafrir (2005) showed that training and employee participation were HRM practices that contributed to organisational performance. Huang (2000) showed that staffing, performance appraisal, compensation and training and development had a positive impact on firm performance.

The difficulty with the universal approach is that there is no consensus on what practices constitute best practices. Looking at the above short survey it is obvious that there is no consensus regarding universal best practices. The literature reveals some examples which include employment security, self-managed teams, sharing of information, grievance procedure, incentive compensation, participation, promotion from within, recruitment, selection and training.

2.2.2 Contingent Perspective

The contingency view suggests that some organisations will gain greater benefit than others from HRM practices. Richard and Johnson (2001) suggest that contingency theories posit that the relationship between the relevant independent variable and the dependant variable varies for different levels of a critical contingency variable. They established that

while some HRM practices worked directly to influence performance, other performance effects were moderated through the strategy variable.

Khatri (2000) indicated that contingency scholars believe that in order for HRM practices to be effective it needs to be consistent with other aspects of the organisation. Business strategy was identified as a common factor. His study found that strategy moderates the relationship between HRM practices and organisational performance. HR strategy would be more effective only when appropriately integrated with specific organisational and environmental context (Chang and Huang, 2005). Whereas the universalistic approach implies a direct relationship between HRM practices and firm performance, the contingency perspective implies interactions between variables, hence it can be more complex.

The implication of this is that the relationship between HRM practices and firm performance differs when a contingency variable is added. Paul and Anantharaman (2003) showed that organisational performance namely financial, employee retention, productivity, quality and speed of delivery were influenced by HRM practices via the intervening variables of competence, teamwork, organisational commitment and customer orientation.

The organisation's strategy is seen as the primary contingency variable. An example of this is also suggested by Neal *et al* (2005). It was argued

that HRM practices that enhance the knowledge, skill, ability and motivation of employees would have greater impact on productivity if the organisation is using a strategy that requires highly skilled and motivated employees. They also found that apart from strategy the relationship between HRM practices and productivity is contingent on organisational climate and effectiveness.

According to this argument, HRM practices does enhance organisational performance however, organisational effectiveness is seen as a moderating variable. The research will use the contingency theory perspective, in order to establish the relationship between HRM practices and business performance while using organisational effectiveness (inspirational leadership, corporate reputation and work environment) as the contingency variable within the South African Breweries Limited.

2.3   *Performance Theory*

Performance can be defined as the outcomes that indicate or reflect the organisation's efficiencies or inefficiencies in terms of corporate image, competencies and financial performance (Khandekar and Sharma, 2005). They used a wide range of variables in their study of global Indian firms. These included product quality, customer satisfaction, new product development, ability to attract and retain employees and relations between management and employees. They found that HRM practices

are positively correlated to the above organisational performance indicators.

In his study of companies in Singapore, Khatri (2000) used financial indicators namely sales growth, and non financial indicators namely public image and goodwill, quality of services, efficiency of operations. Tzafrir (2005) used subjective and objective measures in measuring organisational performance. The indicators that he used were quality of product/service, new product development, customer satisfaction, sales increase and profitability.

Performance can be measured through objective or subjective means. Sousa, Aspinwall and Rodrigues (2006) has defined performance measurement as the process of quantifying the efficiency and effectiveness of action and performance measure as the metric used to quantify that action. Sousa *et al* (2006) also states that the 'traditional methods of measuring a company's performance by financial indices alone have virtually disappeared from large organisations.'

Clark (1998) indicates that while individual case studies cannot be generalised because the human resource specific strategies will be sector specific, the direct financial contribution of HRM to economic performance can only be measured at the level of the case. The reason being that one can gather information on firm performance and market pressures. He further goes onto to explain that generic measures such

as motivation, training, reduced turnover and improved productivity can be viewed as three economic measures of improved output, improved time measures and improved financial indicators. In defining organisational performance, Neal *et al* (2005), used productivity based on labour productivity as an indicator.

Richard and Johnson (2001, p.302) stated that 'research testing hypotheses should include multiple performance measures to avoid misleading descriptive and normative theory building.' They included intermediate and bottom-line measures of firm effectiveness. They used employee turnover, employee productivity and return on equity in their study of human resource management effectiveness and firm performance. In their study of examining the link between human resource management orientation and firm performance of Greek firms Panayotopoulou and Papalexandris, (2003) measured performance using financial measures of profitability and market share as well as operational and organisational performance measures of sales growth, product quality and industrial relations.

In determining the performance measures of the organisation, the studies mentioned above used a combination of financial and non-financial measures. This was to done to obtain a balanced view of the firm performance.

2.3.1 The Balanced Scorecard

The balance scorecard which was developed by Kaplan and Norton (1996) is a way of translating an organisation's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system. The scorecard provides a set of measures that gives a comprehensive view of the business. The scorecard brings together the diverse elements of the company's competitive agenda.

The scorecard comprises of four balanced perspectives namely: financial, customers, internal business processes and learning & growth as shown in figure 3. Non-financial measures are at the heart of describing strategy and of developing a unique set of performance measures that clearly communicate strategy (Kaplan and Norton, 1996). It also highlights the importance of including all four aspects of the balanced scorecard.

Figure 3: Model for the Balanced Scorecard

(Kaplan and Norton, 1996)
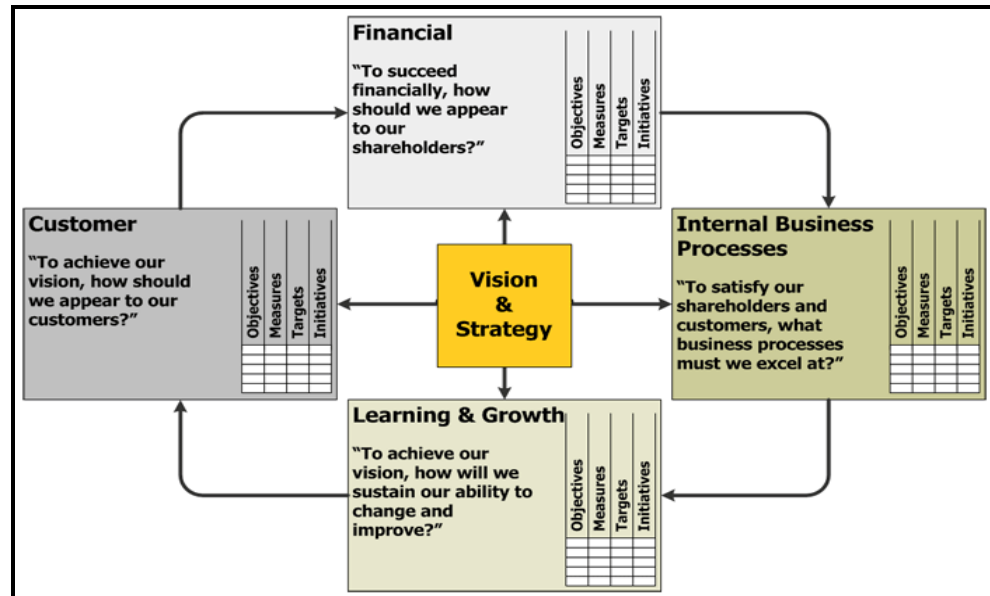
The financial perspective: This perspective traditionally focuses on profitability, growth and shareholder value (Kaplan and Norton, 1996).

The customer perspective: This dimension measures performance against criteria that are important to the organisation's customers and consumers. Kaplan and Norton (1996) indicate that quality falls within this criteria.

The internal business perspective: This dimension focuses on the critical internal operations that will ensure that customer expectations are met. This perspective stems directly from the internal processes and systems needed to ensure that the rest of the perspectives can be met

and that the smooth running of the organisation can be ensured (Kaplan and Norton, 1996).

The learning and growth perspective: Kaplan and Norton (1996) define this perspective as the organisations ability to learn and adapt to the changing environment. This includes learning, training and development of employees.

Guest (1997) indicates that performance is an internal criterion used by the company while outcomes are much broader. These might include environmental issues, job satisfaction, contribution to the community, etc. Guest (1997) also makes reference to the balanced scorecard indicating that one should not concentrate on one view of performance at the expense of the others. This means that each dimension of performance should be optimised rather than maximising one at the expense of others.

The financial perspective in the case of the research will be rands per hectolitre of product packaged (R/hl). The integrated quality management scores (IQMS) will be used in the research as the customer satisfaction dimension. The efficiency numbers of various plants will be used as a measure in the internal business dimension. The labour turnover of each plant will be used as the performance indicator in the learning and growth dimension.

The balanced scorecard therefore provides the framework in which the performance of the organisation can be effectively measured.

2.4   Linking HRM Practices and Performance

Paul and Anantharaman (2003) used the balanced scorecard in identifying intervening variables between HRM practices and firm performance. The balanced scorecard provided the framework that defined what the companies should focus on while the HRM practices framework offered the specific tools and paths to obtain the business goals. The model that they proposed is shown in figure 4.

Figure 4: Model for the HRM-Performance Linkage
**(Paul and Anantharaman, 2003)**
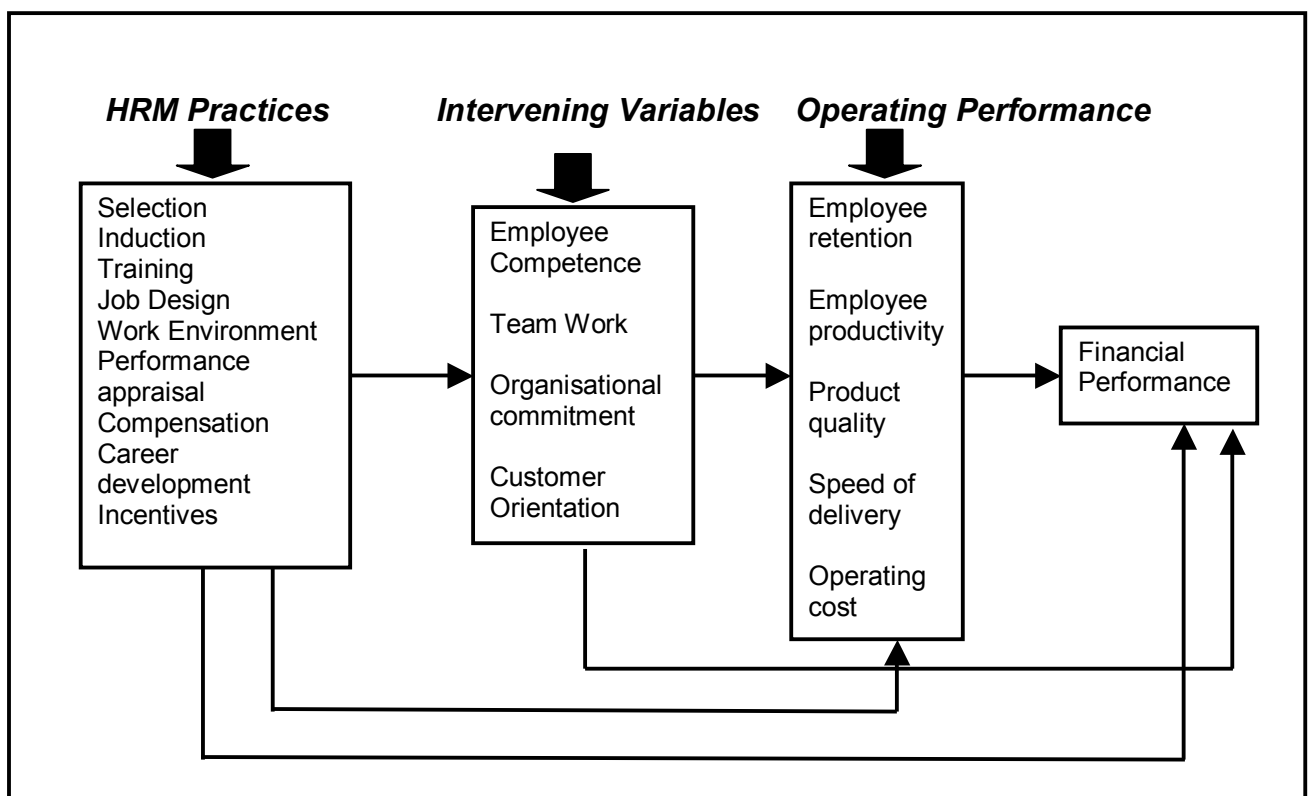
Paul and Anantharaman (2003) separated firm performance into operating and financial performance as they identified financial performance as the chief strategic goal of any organisation. Operational performance was defined in terms of employee retention, employee productivity, product quality, speed of delivery and operating cost. Financial performance was measured in terms of growth in sales, net profit and return on investment. They found that not a single HRM practice had a casual relationship to financial performance but every HRM practice influences financial performance indirectly through one or more intervening variables and operational performance dimensions.

In their study of Japanese Multi National Companies, Park *et al* (2003), found that employee skills, attitudes and behaviour played a mediating role between HR systems and firm performance in multinational corporations. They examined the effect of synergistic 'bundles' of HRM practices on firm performance and found that besides positively affecting firm performance, the results did not depend on location of the company.

Hence the results imply that the casual relationship could be universal, neither national boundaries nor differences in national culture change the casual relationship. While they do not prescribe the type of HRM practices that they measured, they specify that they need to consist of three aspects namely performance orientated practices, strategic alignment of practices and employee skills enhancing practices. The model that Park *et al* (2003) developed is shown in Figure 5.

Figure 5: Model for the HRM-Performance Linkage (Park et al, 2003)
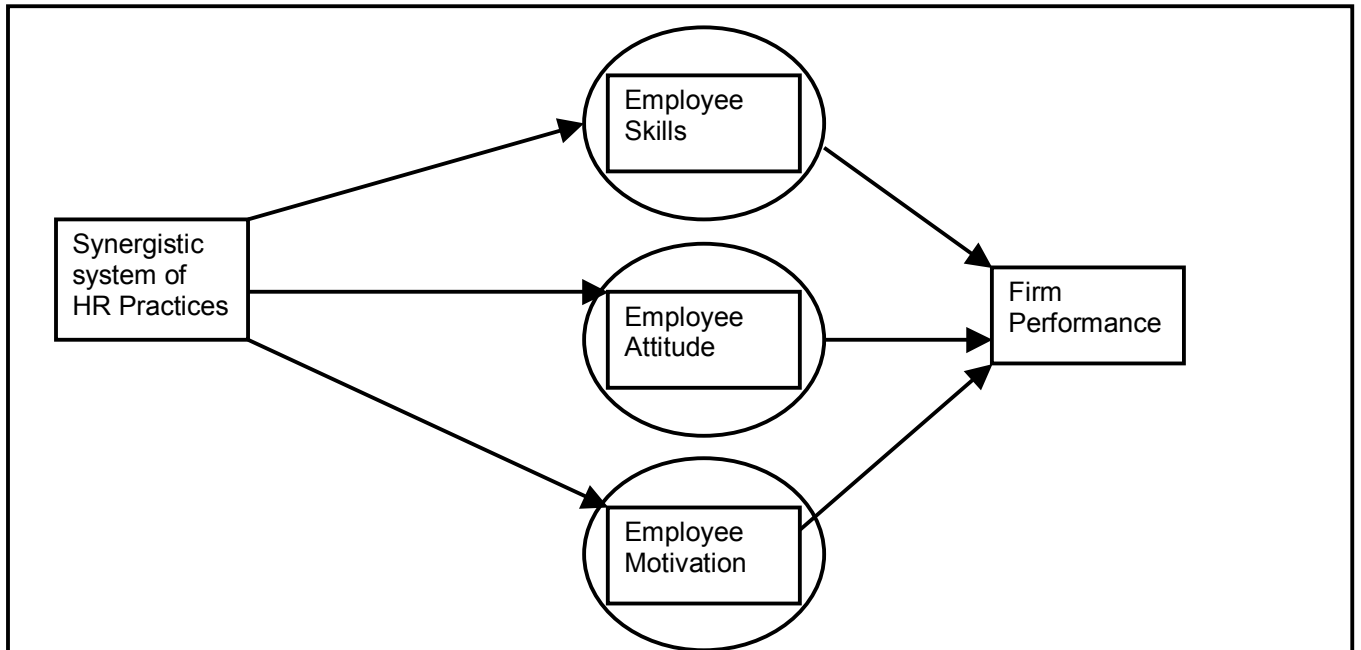
Park *et al* (2003) describes the moderating variables of employee skills, employee attitude and employee motivation as the 'black box' that generates firm competitiveness from HRM practices. Thus changes in employee skills, attitudes and motivation that are caused by HRM practices precede increase in firm performance.

In their study of the impact of high performance work systems on firm performance, Huselid and Becker (1998) proposed that intervening variables of employee skills, employee motivation and job design and work structure link operating performance which in turn influences profits and market and shareholder value as shown in Figure 3.

The concept of the balanced scorecard, conceptual models and HRM outcomes identified by prior research, it is possible to develop an integrated HRM practices-firm performance model which is discussed as a hypothesised model in chapter 3.

2.5 Integration of Literature Review

An examination of the literature available and presented above indicates that human resources can provide a competitive advantage to companies. HRM practices also play and important role in ensuring that organisations are able to achieve their business objectives. The literature also indicates that in order for organisations to be able to maximise the impact of their HRM practices, they need to understand the 'fit' between their organisation and the external environment as elaborated by Guest (1997).

The literature review has shown that there are numerous HRM practices that can be implemented by organisations. These include performance appraisals, training and development, recruitment, compensation, work environment, career development, etc. While the various studies tested different HRM practices and firm performance, there seems to be very little agreement on which HRM practices are regarded as best practices. Training and development, career development and performance appraisals were the most common practices that were tested albeit as part of different 'bundles'.

The balanced view with regards to performance was definitely the preferred tool that was utilised in the literature. While some authors directly alluded to the balance scorecard as the tool to identify performance indicators, others used the concept in identifying the relevant performance indicators. An analysis of the literature with regards to the business performance indicators is shown in table 3.

The performance indicators specific to this research is also shown in table 3. These performance indicators describe the industry in which the study is conducted and tries to incorporate and link all relevant stakeholders. These include shareholders, employees and customers.

Table 3: Comparison of Generic (literature) measures and Specific measures (research)

Perspective	Generic Measures	Specific Measures
Customer Perspective	▪ Customer Satisfaction ▪ Customer Retention ▪ Quality	Integrated quality management system (Quality)
Financial Perspective	▪ Profitability ▪ Shareholder Value ▪ Growth ▪ EVA	Rands per hectolitre (Profitability)
Internal Business Perspective	▪ Internal processes ▪ New product development ▪ Response times ▪ System usage	Line production efficiencies (Response times)
Learning and Growth Perspective	▪ Staff retention ▪ Training opportunities ▪ Productivity levels	Labour turnover (Staff retention)

2.6 Summary

Chapter 2 outlined the theory and literature review and the integration thereof. Chapter 3 will focus on the research questions and the motivation for the research.

CHAPTER 3:   RESEARCH QUESTIONS AND HYPOTHESIS

Chapter 3 will focus primarily on the motivation for the research.

The motivation for the research was to establish whether there was a casual relationship between the HRM practices used in the manufacturing departments and organisational effectiveness and between organisational effectiveness and manufacturing performance. The final aim of the research is to develop a model in order to identify groups or bundles of HRM practices that should be implemented within the manufacturing division to enhance business performance.

3.1   Research Questions

Research Question 1: Is there a relationship between the human resource management practices and performance indicators of the production lines and what is the nature of the relationship?

This question seeks to determine whether a relationship exists between HRM practices and business performance. In addition to this the nature of the relationship namely positive or negative will also be tested. The company that was researched used specific HRM practices which formed part of the hypothesis testing and the proposed model.

Research Question 2: Is there a relationship between human resources practices and organisational effectiveness and what is the nature of the relationship?

This question sought to establish whether there is a relationship between human resource practices and organisational effectiveness. In addition to this the nature of the relationship namely positive or negative will also be tested.

Research Question 3: Is there a relationship between organisational effectiveness and performance indicators?

This question sought to establish whether there is a relationship between organisational effectiveness and performance indicators. In addition to this the nature of the relationship namely positive or negative will also be tested. In doing so the relationship or relationships between HRM practices, organisational effectiveness and performance indicators will be established.

3.2   Hypotheses

The following hypothesised model will be tested:

Figure 6: Hypothesised model for the HRM-Performance Linkage
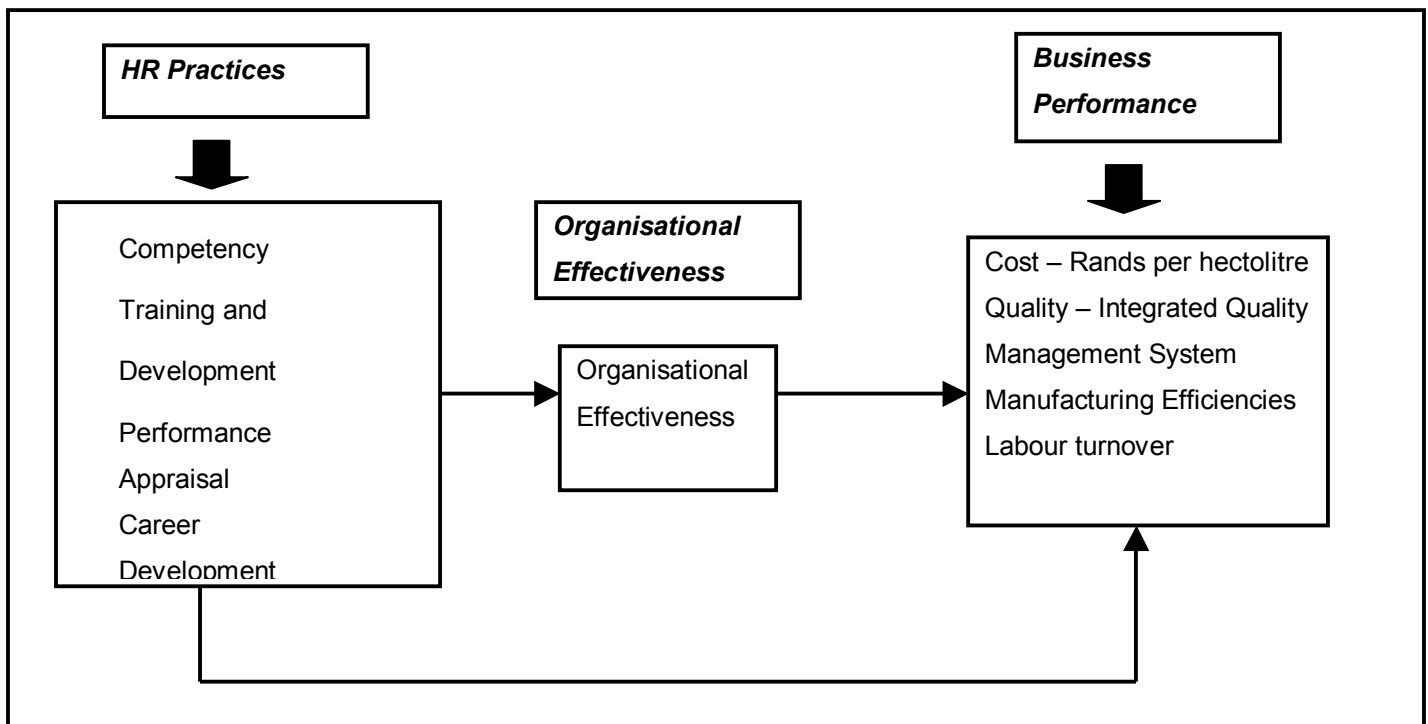
3.3   Summary

Chapter 3 outlined the research questions to be tested during the research as well as the hypothesized model that will be tested.

Chapter 4 will focus on the research methods to be used.

CHAPTER 4:   **RESEARCH METHODOLOGY**

Chapter 4 will comprise the research methodology used in the research.

Sellitz (as cited in Mouton and Marais, 1990, p32), research design is defined as "the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure". According to Mouton and Marais (1990, p33), "the aim of a research design is to plan and structure a given research project in such a manner that the eventual validity of the research findings is maximized".

Research design is therefore synonymous with rational decision-making during the research process. Irrespective of how structured or unstructured the research project is likely to be, it is the duty of the researcher to ascertain which general nuisance variables may render the results invalid and to take every possible step to ensure that these factors are either minimized or eliminated (Mouton and Marais, 1990).

In order to understand the dynamics of the study, it is imperative to establish research variables. The independent variable is defined as the variable that influences the dependent variable in either a positive or negative way (Sekaran, 1992). For the purpose of the study the independent variable was HRM practices.

The dependent variable is defined as a variable of primary interest to the researcher. The researcher's goal is to predict or explain the variability in the dependent variable (Sekaran, 1992). For the purpose of the study the dependent variable was business performance. The study was exploratory. The use of quantitative data is most appropriate for exploratory research (Sekaran, 1992).

'The study and measurement of performance in a specific industry conveys more meaningful results than cross-industry studies because industry economic conditions are constant for all firms in the same industry' (Paul and Anatharaman 2003, p.1249). Hence the study of a single industry and single dominant company should provide more meaningful results. There has not been a study to determine the relationship between HRM practices and business performance in this industry.

4.1 Research Design

The research tried to identify the HRM practices that had an impact on business performance. There has been much work done on the relationship between HRM practices and business performance, however there has been little work done on industry specific relationships. The research aimed to build on the theories and findings of previous research and see whether it applied to the South African Breweries Limited. The study was exploratory in that it tried to build a picture of the relationship,

if any, that exists between HRM practices, organisational effectiveness and business performance.

4.1.1 Data Collection

Secondary data formed the primary source of information to obtain business performance indicators and information on the HRM practices that were used in the South African Breweries. The company organisational effectiveness (OE) survey questionnaire was the primary source of information to obtain data on the dimensions of organisational effectiveness.

The company stored information on two levels. The first level of information pertains to regional information which consists of indicators that affect the specific region in question. The second level of information pertains to divisional information and comprises of indicators that affect the entire company. In most cases the indicators that were measured were exactly the same except for the targets which were different.

Information on the business performance indicators and organisational effectiveness scores for the past 3 years was obtained from the company and regional databases. Information on the HRM practices scores was also obtained from the divisional database.

4.1.2 Organisational Effectiveness

Figure 7: Model of the organisational effectiveness survey
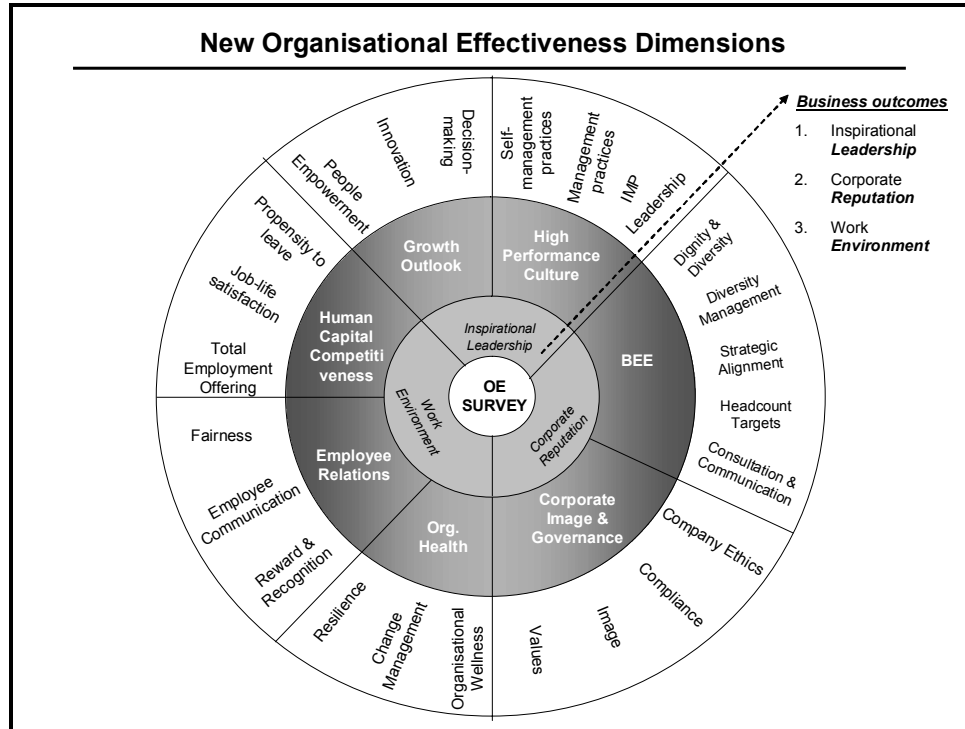
The organisational effectiveness score was obtained from the company data base and was based on the survey questionnaire. The survey has been conducted within the organisation for the past 4 years. The scores for each production line were obtained and consisted of an overall score as well as department specific score. The OE Survey consisted of 107 questions which were organised in a hierarchical structure. Figure 7 is an illustration of the dimensions measured at different levels of the survey (The South African Breweries Portal, 2007).

At the highest level (Level 3) is the total OE Score which represents a global summary of how an employee perceives the effectiveness of the

organisation. The next level (level 2) divides this broad view into 3 business outcomes. These examined employees' perceptions of the leadership ("inside looking up"), their perception of how the corporation looks to outside stakeholders ("outside looking in") and how they perceive the work environment around them ("inside looking around").

Each of these broad outcomes is then broken into two or three scores (level 1) which provides the simplest clearest overview of how the company (or division) is perceived by its employees. Level 1 has 7 scores, each of which reflects a core aspect of the organisations functioning. Finally, these broad outcomes are again split into 25 more specific scores (Level 0) which outlines particular aspects of perception.

The organisational effectiveness survey questionnaire was done on an annual basis. It was a census study with every employee being encouraged to participate. It was a self administered questionnaire that was done manually by shift workers while those staff members that have access to computers did a web based version of the questionnaire. The questionnaire comprises 3 dimensions that test organisational effectiveness. These include leadership, corporate reputation and work environment.

Each dimension comprised a series of questions as outlined above. The questions were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Thus, a dimension obtaining an

average score of 3.5 is shown as 70%. The company has internal targets for OE scores. A score of 70% is deemed acceptable and scores below 70% are areas of concern.

4.1.3 HRM Practices

The organisation had a predetermined set of HRM practices that it measures on an annual basis throughout the organisation including manufacturing. The HRM practices that were identified from literature were identified on the database and those measures and scores were extracted from the system. They included the amount of training and development that has been given to employees within the organisation, the competency of individuals to do their jobs and integrated performance management which included career discussions and performance reviews.

Competency

Competency of employees was measured using the Competency Acquisition Process (CAP). CAP is an outcomes-based education (OBE) learning framework used to define and develop competence within the organisation. Its objective was to provide an easily accessible, simple-to-use learning platform aimed at defining specific role competencies and encouraging individual ownership for learning and the achievement of competence.

It involved specifying the competence for a job and then aligning learning to meet competence required for that job. CAP gives every employee an opportunity to access learning solutions and develop competence in line with organisational needs and their own capability and aspirations. This HRM practice was measured on an annual basis against a set of prescribed list of targeted jobs. The prescribed list was referred to as the CAP index and contained jobs that were viewed as having the most impact on the business.

Training and Development

Training and development occurred at all levels in the organisation. The organisation was consistently regarded as a leader in training and development in South Africa and had received numerous awards from the American Society for Training and Development. The amount of training delivered in a particular manufacturing facility was measured as the number of training days per employee. This comprised of the total number of training days recorded by the manufacturing region divided by the total number of employees employed at that particular region.

Performance Appraisal

The company had an integrated performance management system that incorporated monthly one on one discussion and bi annual performance reviews. The documents that formed the basis of these discussions were the annual goals that were developed at the beginning of the financial year. Every employee in the organisation was expected to go through

the integrated performance management system. Performance appraisal obtained from the secondary data was in the form of the number of performance appraisals done per manufacturing region per year.

Career Development

The information on career development was obtained from regional data bases. The organisation performed career development discussions annually in all the different departments. The information that was contained in the discussions comprised of individual development needs, business development needs and developmental plans that ensured that individuals developed themselves in order to meet business and personal needs.

4.1.4 Business Performance Indicators

The business performance indicators that were measured were outlined in chapter 3. The balanced scorecard was used as the framework to measure business performance indicators. The organisation had a predetermined set of business performance indicators that were measured on an annual basis throughout the organisation including manufacturing. These were either accessible through the centralised database or from the various manufacturing regions. They were used to measure the performance of each manufacturing region.

Financial Perspective – Rands per hectolitre

This business indicator measured the performance of the department with regards to cost. The total actual cost of the operation and the volume of beer produced by each operation were obtained from regional databases. Rands per hectolitre (r/hl) was then calculated for each region as follows:

$$\frac{r}{hl} = \frac{(total\ cost)}{volume\ of\ beer\ produced}$$

Customer Perspective – IQMS

The integrated quality management system (IQMS) measured the performance of the department with regards to quality. This was measured using six sigma methodology and critical to quality parameters. Each packaging department had divisional targets which they had to be measured against. A score of 2.5 sigma was deemed to be satisfactory. Hence the research used this target as the benchmark score. Scores above 2.5 were deemed to be good to the consumer, while those below 2.5 were deemed to be unacceptable to the consumer.

Internal Business Perspective – Production Efficiencies

The internal business perspective was measured using production efficiencies. This measured how efficient a packaging department was in delivering the product to the consumer. A high efficiency number indicated that the department was able to produce a packaged product

with relatively few production stoppages while the converse was true for a low efficiency number. The divisional target was used as the benchmark for this indicator. Efficiencies above 85% were deemed to be good, while those below 85% were deemed to be unacceptable.

Learning and Growth Perspective – Labour Turnover

Labour turnover was used as the indicator to measure the performance of the manufacturing regions against the learning and growth perspective. Each region had their own targets with regards to labour turnover. The divisional target of 5% was used as the benchmark for this perspective. A measure of less than 5% was viewed as good labour turnover while that above 5% was viewed as poor labour turnover.

4.2   Population and Sample

There are 7 breweries in South Africa located in 5 different provinces. These are regarded as the manufacturing sites. Each brewery has a single packaging department and each packaging department in turn has between 1 and 6 production lines. In total there are 25 production lines. Each production line consists of 3 shift based teams and a dayshift support team. The shift teams vary between 8 to 17 people depending on the size and complexity of the production line. The dayshift teams vary between 4 and 8 people. In total each production line has a staff compliment of between 10 and 60 people. The employees on the

production lines consist of operators, artisans, technicians and engineers.

The population was all packaging departments within the different breweries which are 7 in total. The unit of analysis refers to the level of aggregation of the data during subsequent analysis (Sekaran, 1992). Sekaran (1992) indicates, when comparing different departments in the organisation then the data analysis will be done at department level. This implies that the individuals in the department will be treated as one unit and comparisons will be made treating the department as the unit of analysis.

The study tried to analyse the data from different production regions and in particular use the data from the various packaging departments. The packaging departments were the primary contributors and controllers of the business performance indicators as outlined in chapter 3. Hence, the unit of analysis for the study was the manufacturing packaging departments of the South African Breweries limited. Due to the small population, all 7 packaging departments were analysed during the study in order to obtain all relevant secondary data.

4.3   Analysis

The business performance measures which were defined according to the dimensions of the balance scorecard needed to be properly analysed and presented to ensure that they were measuring what they should. Descriptive statistics was done to understand the performance of the various regions on a year on year basis.

Neal *et al* (2005) used the multiple regression analyses to test organisational climate as a moderator variable between HRM practices and productivity. Paul and Anantharaman (2003) used bivariate correlation analysis between HRM practices, intervening variables, operational performance parameters and financial performance to see if there was significant correlation between HRM practices and the intervening variables as well as HRM practices and performance.

Path analysis can be viewed as an extension of multiple regression. Whereas in multiple regression, the researcher is interested in predicting to a single variable, path analysis involves more than one variable. Path analysis allows the testing of a theory of casual order among a set of variables. In trying to establish a casual link between HRM practices and organisational performance Paul and Anantharaman (2003) executed a path analysis using multiple regression method due to the small sample size and exploratory nature of their study.

The same techniques were used to do the analysis using organisational effectiveness as the moderator/intervening variable. Means, standard deviations and intercorrelations between the moderator variable, independent and dependant variables were obtained.

4.4   Summary

Chapter 4 outlined the research methods as well as the population and sample and analysis of the research. Chapter 5 will focus on the research results.

CHAPTER 5:   RESEARCH FINDINGS

This chapter focused on the results of the research. The research findings have been aligned to the phases that were involved in the gathering of the data. The initial phase involved the gathering of the secondary data. The data that was obtained for the relevant variables was then used to extrapolate descriptive statistics in the form of trend analysis. The next phase involved the detailed statistic analysis to establish whether there are any relationships between the variables.

The results were interpreted by using the means and standard deviations of the HRM practices and business performance indicators. The results of the correlation analysis, correlation map and regression analysis between HRM practices and business performance indicators are also discussed.

5.1   Descriptive Analysis

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Various techniques that are commonly used are classified as:

1. Graphical description in which we use graphs to summarise data.

2. Tabular description in which we use tables to summarise data.

3. Summary statistics in which we calculate certain values to summarise data.

In general, statistical data can be described as a list of *subjects* or *units* and the data associated with each of them. Although most research uses many data types for each *unit*, the research used just one data item each for this simple introduction.

5.1.1 Human Resource Management Practices

The following HRM practices will be discussed, namely, competency acquisition processes, training and development, performance appraisals and career development.

a.   Competency Acquisition Process

The figure below indicates that the majority of breweries reached their target of 75% in terms of competency acquisition processes with a mean of 79%. Most of the breweries with the exception of Rosslyn and Ibhayi have shown a decline in the CAP scores in 2006.

Figure 8: Competency Acquisition Process
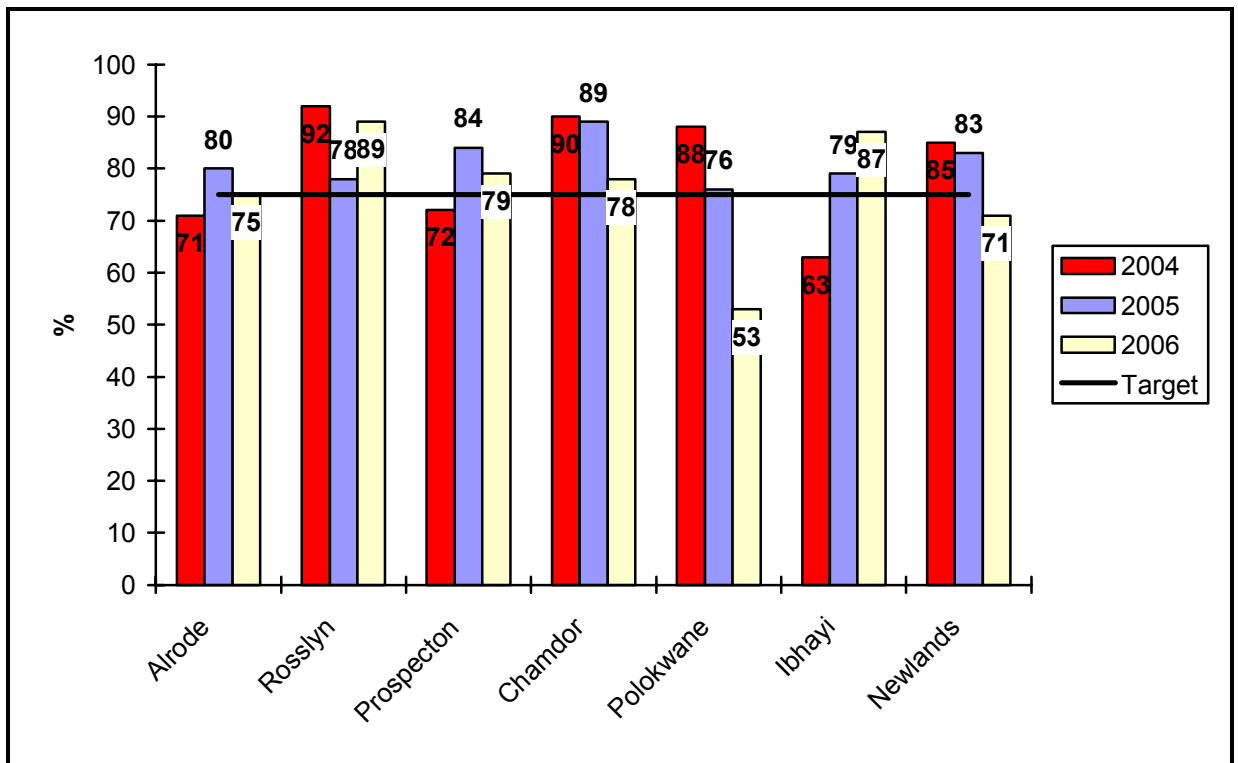
b. **Training and Development**

It can be seen from the figure below that the average number of days allocated for training and development per year were as follows:

2004 (7.5 days)

2005 (8 days)

2006 (7.8 days)

All the breweries showed sustained commitment to training and development over the past 3 years. The average of 7.7 days also indicates that SAB as an organisation is committed to the development of their employees.

Figure 9: Training and Development
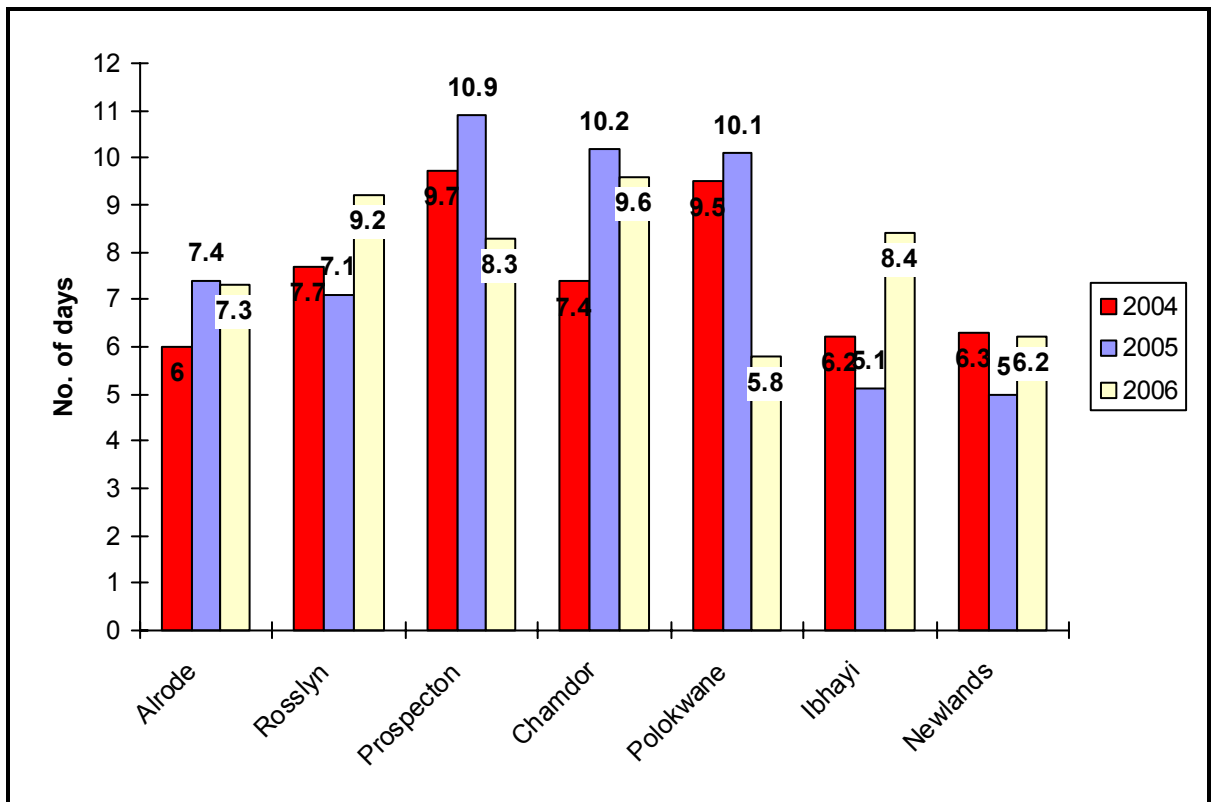
c. **Performance Appraisal**

The figure below indicates that the performance appraisal in 2004 was low across all breweries, however there was a year on year improvement from 2004 to 2006 with an average of 94.98%. Only one of the breweries managed to achieve the target of 100% in 2005.

Figure 10: Performance Appraisal
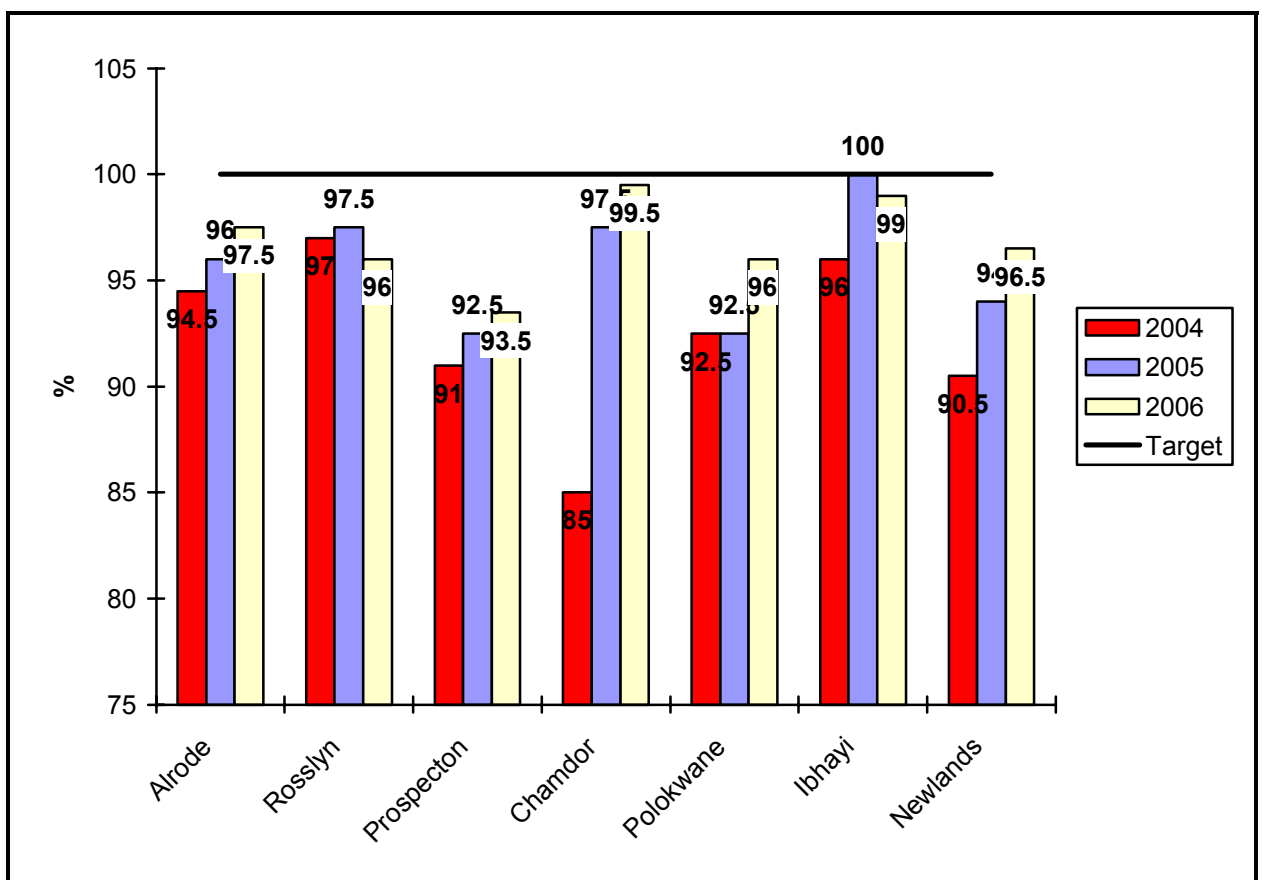
d.   Career Development

As can be seen from the figure below, the scores that were achieved were significantly lower than the target in 2004. In 2005, this improved for the majority of breweries, except Polokwane where a significant decline was noted. In 2006, only Ibhayi exceeded the target of 90%. The average that was achieved was 66.195 which is very low.

Figure 11: Career Development
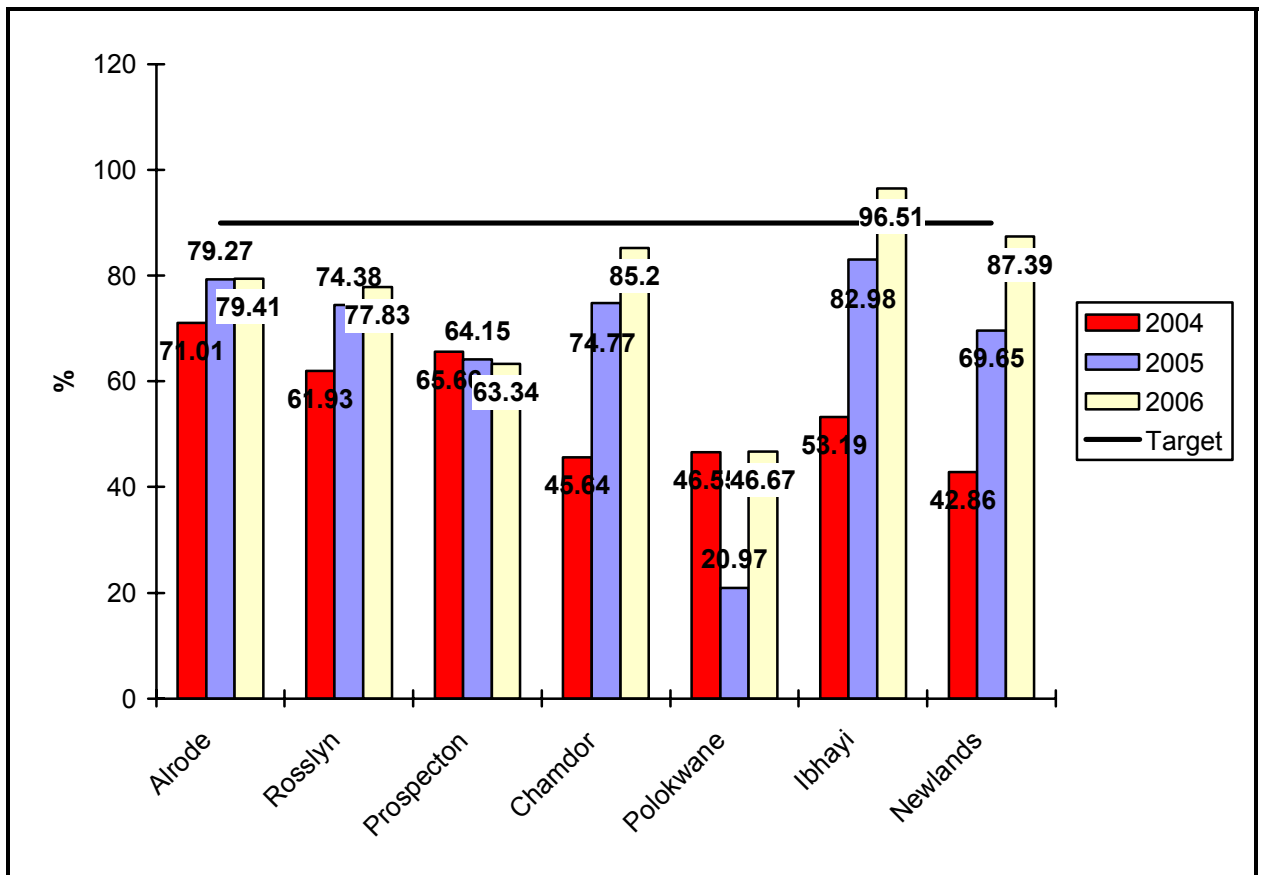
5.1.2 Business Performance Indicators

The following business performance indicators will be discussed, namely, integrated quality management system (IQMS), efficiency, rands per hectolitre and labour turnover.

a.   Integrated Quality Management System

There was a year-on-year improvement with regards to this variable, as can be seen from the figure below. All breweries initially struggled to reach their target during 2004 and 2005, however all breweries managed to exceed the target in 2006. The average IQMS obtained was 2.77 which was below the target of 2.8.

Figure 12: Integrated Quality Management System
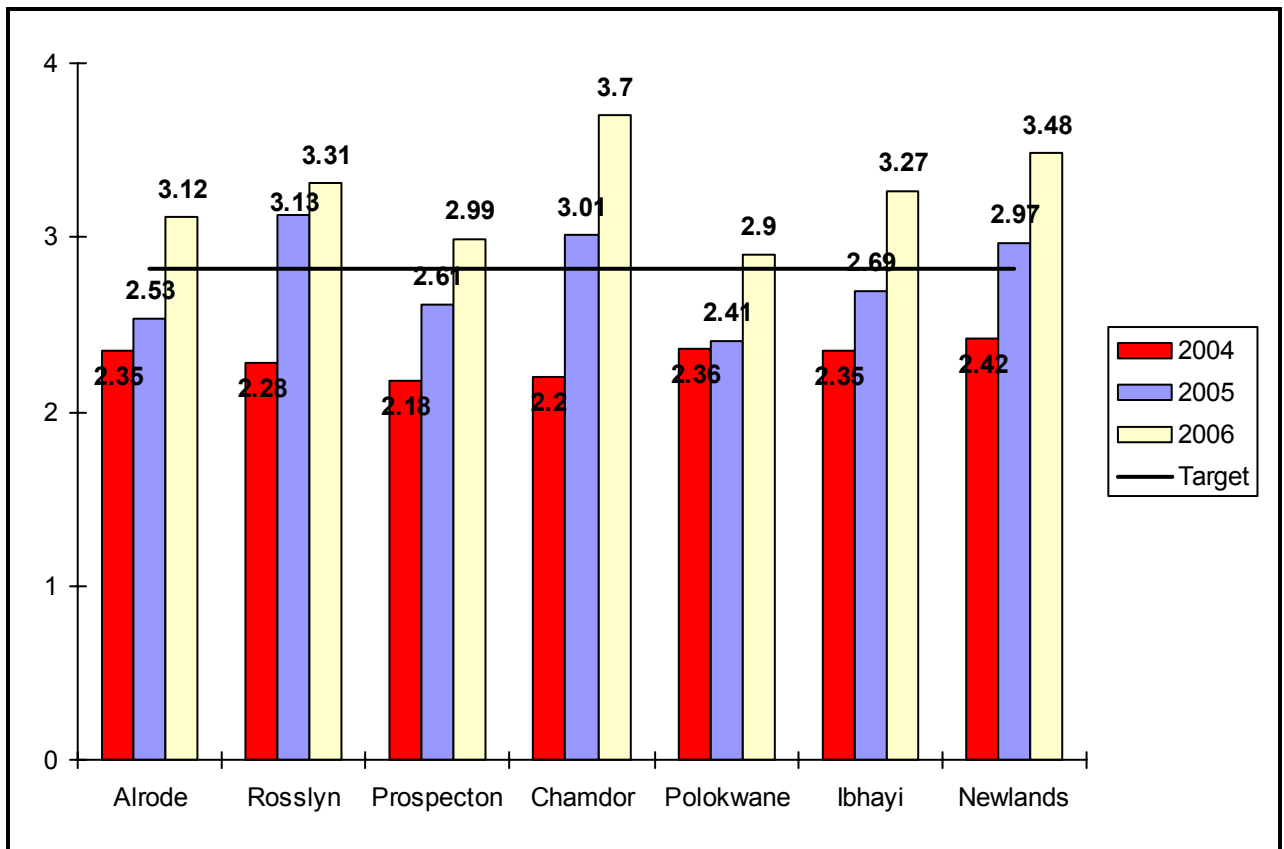
b.   Efficiency

As can be seen from the figure below, the analysis of efficiencies in 2004 indicated that three breweries exceeded the target of 85% while in 2005 only 1 brewery achieved a score higher than the target.

In 2006, there was a significant decline amongst the majority of the breweries with only Ibhayi being able to exceed the target of 85%. The average that was obtained was 82.9 which is below the target of 85%.

Figure 13: Efficiency
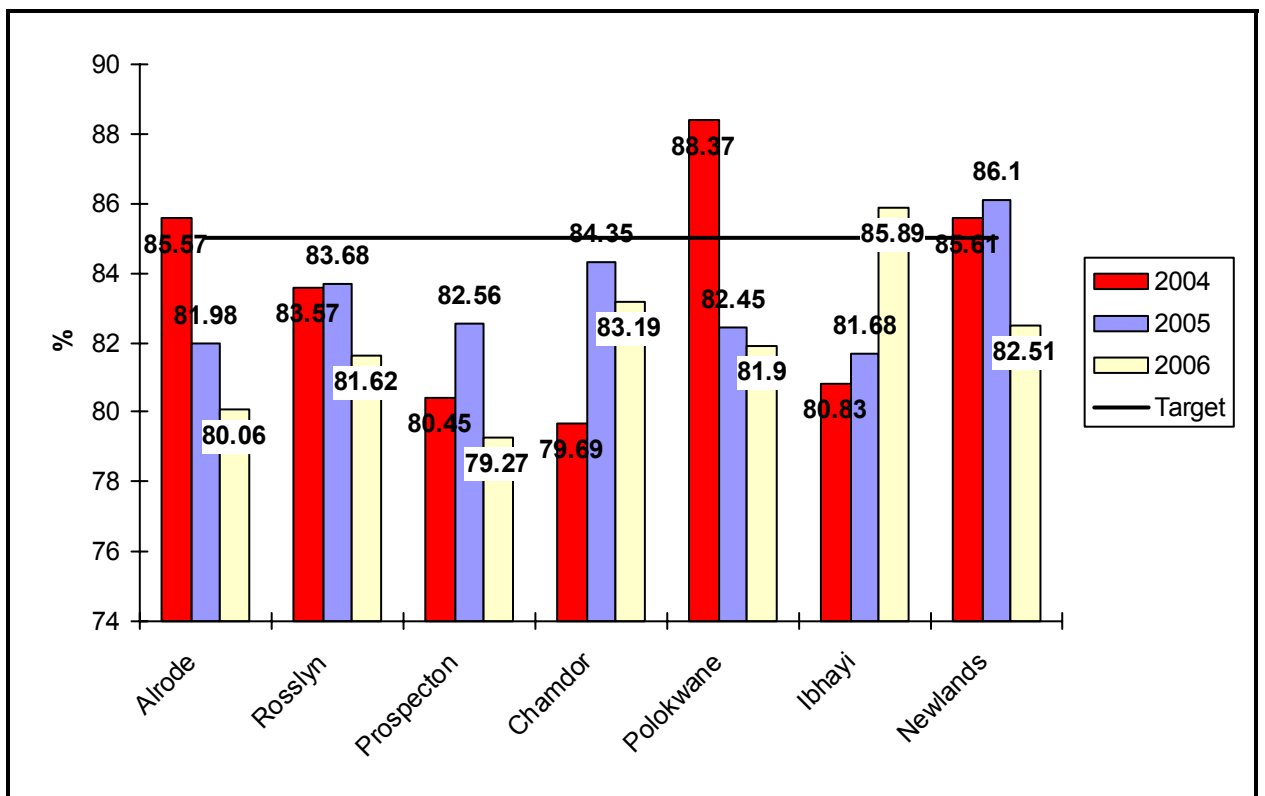
c.   Rands per hectolitre

Rosslyn brewery was the only one to consistently maintain costs to below

R 40.00 per hectoliter, as can be seen from the figure below. Costs were

highest at the Chamdor brewery, where there was a year-on-year

escalation. The average cost was found to be R51.18.

Figure 14: Rands per hectolitre
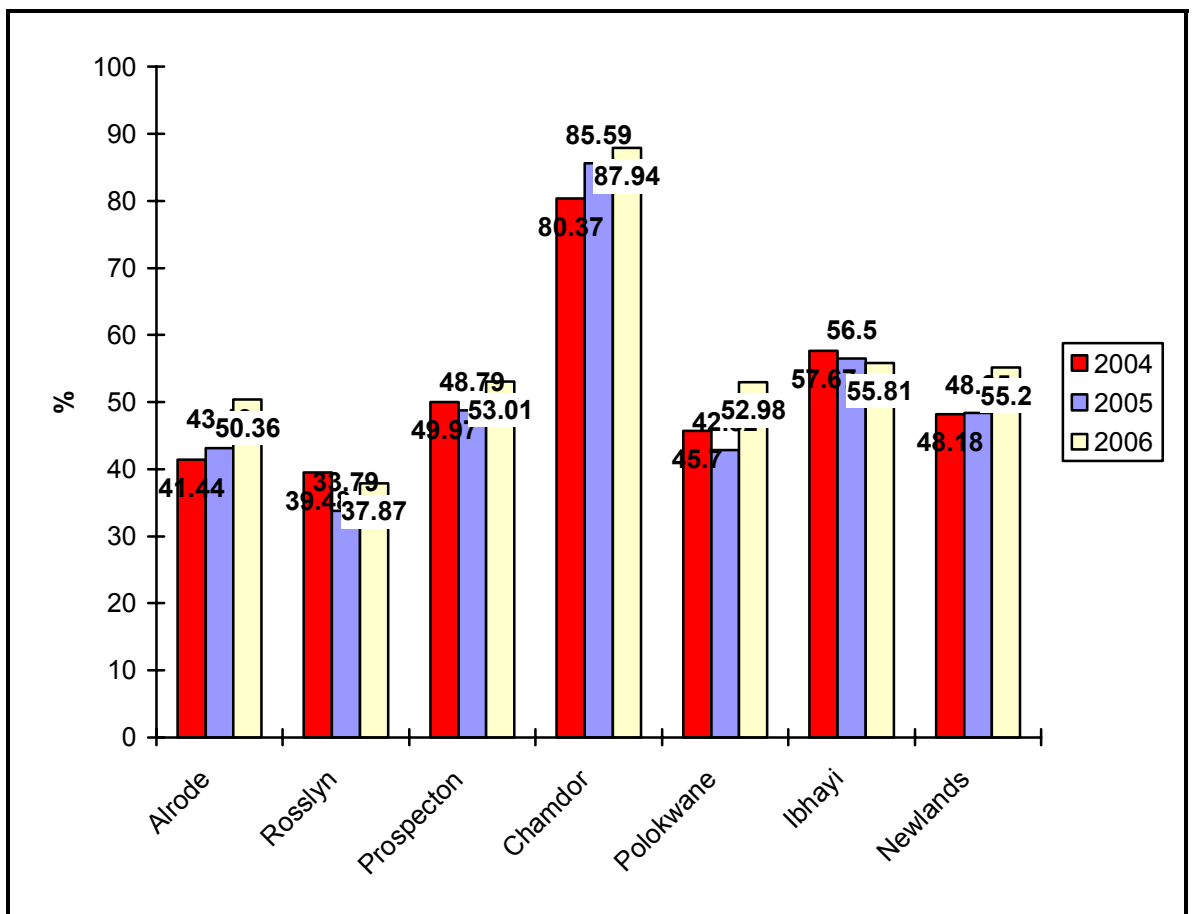
d.   Labour Turnover

As indicative of the figure below, all the breweries exceeded the target of 5%. Polokwane showed a consistently high degree of labour turnover. The results clearly show that there is a concern with labour turnover. The average turnover was found to be 10.8% which is double the target of 5%.

Figure 15: Labour Turnover
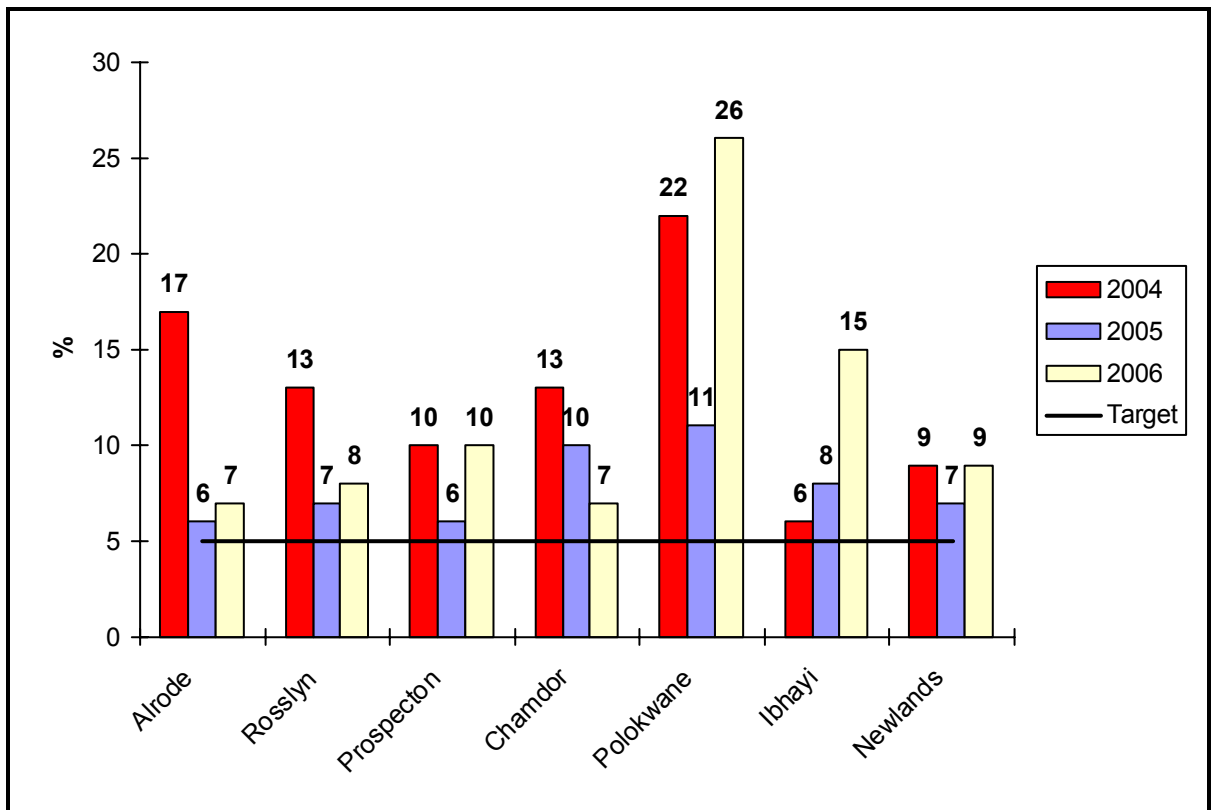
5.1.3 Summary of statistics

The summary of the descriptive statistics which include maximum, minimum, means and standard deviations is shown in Table 5 below.

Table 4: Summary of descriptive statistics

VARIABLE	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
CAP	53.000	92.000	79.143	9.614
Training and Development	5.000	10.900	7.781	1.786
Performance Appraisal	85.000	100.000	94.981	3.523
Career Development	20.970	96.510	66.165	18.225
IQMS	2.180	3.700	2.774	0.453
Efficiency	79.270	88.370	82.920	2.388
Rands/hectolitre	5.700	87.940	51.188	17.946
Turnover	6.000	26.000	10.810	5.354

5.2   Statistics used for Analysis

5.2.1. Path Analysis

Path analysis is a straightforward extension of multiple regressions. Its aim is to provide estimates of the magnitude and significance of hypothesised causal connections between sets of variables (Everitt and Dunn, 1991). For the purposes of this study, the causal connections of HRM practices on business performance were measured.

5.2.1.1. Correlation Tests

Correlation tests were done to determine if there are any relationships as defined by the above definition of path analysis. Correlational analysis determines the relationship between the independent and dependent variables, to indicate whether there is a significant relationship between the two groups (Calder, 1996).

The inclusion of the correlational analysis in the study provided information regarding the relationship between HRM practices and business performance indicators.

Table 5: Summary of correlation test statistics

	CAP	TRAINING & DEVELOPMENT	PERFORMANCE APPRAISAL	CAREER DEVELOPMENT	IQMS	EFFICIENCY	RANDS/ HECTOLITRE	TURNOVER
CAP	**1**	0.386	-0.086	-0.090	-0.052	0.277	-0.141	0.121
Training and Development	0.386	**1**	-0.165	-0.072	0.004	-0.014	-0.014	0.041
Performance Appraisal	-0.086	-0.165	**1**	**0.770**	**0.628**	0.112	0.288	-0.189
Career Development	-0.090	-0.072	**0.770**	**1**	**0.696**	0.051	0.288	-0.328
IQMS	-0.052	0.004	**0.628**	**0.696**	**1**	0.114	0.216	-0.285
Efficiency	0.277	-0.014	0.112	0.051	0.114	**1**	-0.334	0.192
Rands/hectoliter	-0.141	-0.014	0.288	0.288	0.216	-0.334	**1**	-0.114
Turnover	0.121	0.041	-0.189	-0.328	-0.285	0.192	-0.114	**1**
Values in bold are significantly different from 0 with a significance level alpha=0.05								

Values displayed in bold are significant at 0.05 significance level. This implies that the risk of being wrong when rejecting the null hypothesis that the correlations are not significantly different from 0 is less than 5%.

The corresponding p-values (the estimated risk) are displayed in the table below. The lower the p-value, the more different from 0 the correlation. These tests are two-sided.

Table 6: Summary of correlation test statistics (p-values)

	CAP	TRAINING & DEVELOPMENT	PERFORMANCE APPRAISAL	CAREER DEVELOPMENT	IQMS	EFFICIENCY	RANDS/ HECTOLITRE	TURNOVER
CAP	**0**	0.084	0.711	0.697	0.824	0.222	0.541	0.597
Training and Development	0.084	**0**	0.473	0.756	0.984	0.955	0.955	0.859
Performance Appraisal	0.711	0.473	**0**	**< 0.0001**	**0.003**	0.625	0.204	0.410
Career Development	0.697	0.756	**< 0.0001**	**0**	**0.001**	0.826	0.203	0.148
IQMS	0.824	0.984	**0.003**	**0.001**	**0**	0.619	0.343	0.211
Efficiency	0.222	0.955	0.625	0.826	0.619	**0**	0.139	0.402
Rands/hectolitre	0.541	0.955	0.204	0.203	0.343	0.139	**0**	0.623
Turnover	0.597	0.859	0.410	0.148	0.211	0.402	0.623	**0**
Values in bold are significantly different from 0 with a significance level alpha=0.05								

5.2.1.2   Correlation Map

Correlation maps are a visual representation of the results that are obtained from the correlation tests. Correlation maps allow one to visually identify patterns in correlations. These maps are more meaningful when there are many dimensions included in the data.

The results showed that negative associations exist between (no causal connections exist between these variables):

Table 7: Negative associations between HRM practices and business performance

HRM Practices	*Business Performance*
Competency Acquisition Process	Rands/hectolitre and IQMS
Training& Development	Rands/hectolitre and Efficiency
Performance Appraisal	Turnover
Career Development	Turnover

The results showed that positive associations exist between (illustrations of causal connections) in Table 8 on the following page:

Table 8: Positive associations between HRM practices and business performance

HRM Practices	Business Performance
CAP	Efficiency and Turnover
Training& Development	IQMS and Turnover
Performance Appraisal	IQMS, Efficiency & Rands/hectolitre
Career Development	IQMS, Efficiency & Rands/hectolitre

The correlation map below uses black and white to respectively identify positive and negative correlations. The diagonal is displayed in grey color.

Figure 16:   Correlation map
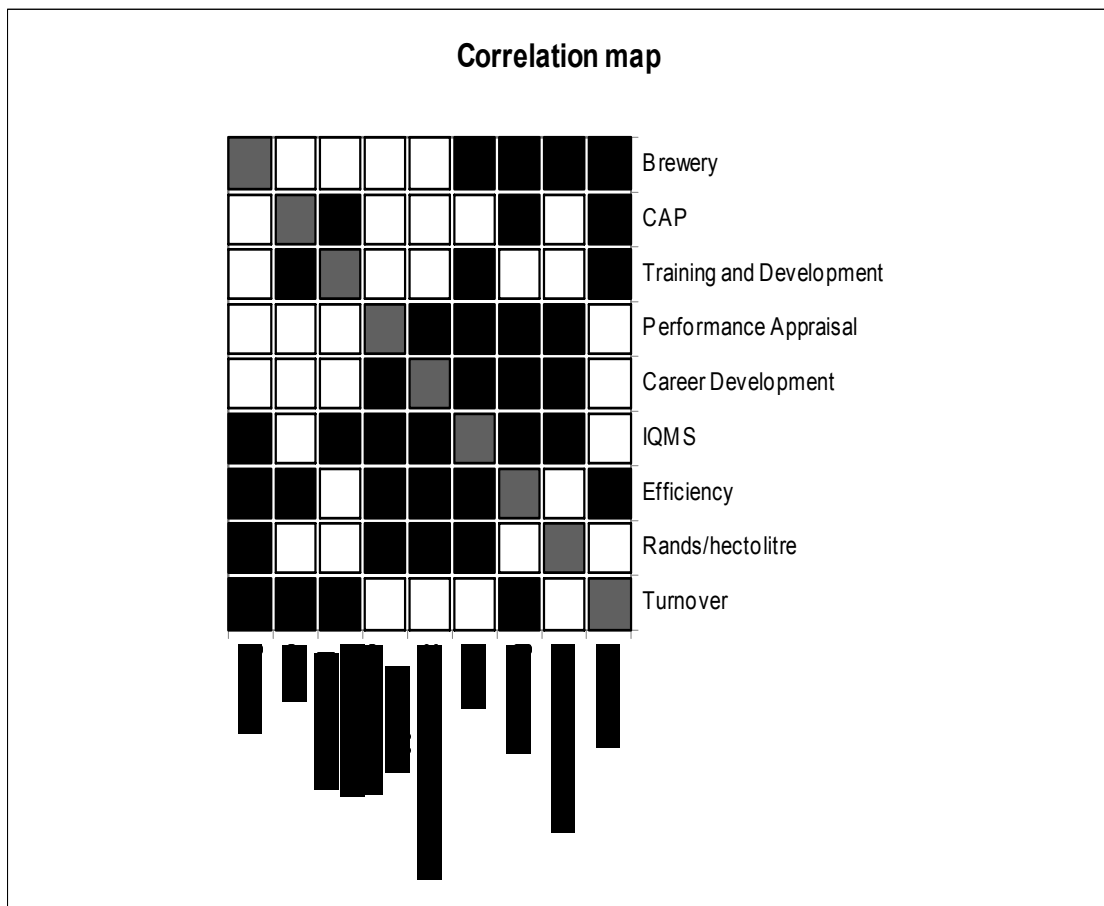
5.2.2 Statistical Regression Analysis

Regression is a generic term for all methods attempting to fit a model to observed data in order to quantify the relationship between two groups of variables (Sekaran, 1992). The fitted model may then be used either to merely describe the relationship between the two groups of variables, i.e. HRM practices and Business Performance.

5.2.2.1 General Notation and Definitions

The two data matrices involved in regression are usually denoted X and Y, and the purpose of regression is to build a model $Y = f(X)$. Such a model tries to explain, or predict, the variations in the Y-variable(s) from the variations in the X-variable(s). The link between X and Y is achieved through a common set of samples for which both X- and Y-values have been collected (Sekaran, 1992).

Single and multiple linear regressions were applied to the data without any meaningful or significant results. The coefficient of determination - R^2 - that indicates the % of variability of the dependent variable for all business performance variables was closer to 0. In order for the data to be a good fit statistically, the R^2 has to be closer to 1 (Sekaran, 1992). The only variable matching this requirement was the IQMS variable. Therefore, it can be deduced that this variable would have the most significant causal connection with HRM practices. In other words, an increase in satisfaction with service delivery will be seen when certain HRM practices are applied, mainly performance appraisals and career

development.

5.3   Summary

This chapter concludes the research finding and the results thereof.

Chapter 6 will focus on the discussion and integration of the results.

CHAPTER 6:   DISCUSSION OF RESULTS

This chapter will focus on the discussion and integration of the results.

6.1   Descriptive Statistics

The results presented by the time analysis trends showed the ability of the various breweries to meet their targets. These are discussed in detail in the following sections.

6.1.1 Human Resource Management Practices

There has been year on year improvement by the various breweries in order to   reach the HRM practices targets.

6.1.1.1   Competency Acquisition Process

CAP which is defined as an outcomes-based education learning framework and used to define and develop competence within the organisation has showed year on year improvement. All breweries showed considerable improvement on achieving their CAP targets, with the exception of Polokwane and Newlands breweries, all other breweries were able to achieve and exceed their targets during 2005 and 2006.

6.1.1.2   Training and Development

Training and development programs are designed to help an organisation satisfy its skill requirements and to ensure that employees continuously develop themselves (Huang, 2000). With regards to training and development the study revealed that the organisation continues to

show commitment to the development of employees. The average training days ranged between 7.5 days to 8 days. Although the specific breweries varied in their number of training days, there was a noticeable increase among all breweries in 2005 and 2006.

6.1.1.3   Performance Appraisal

Performance appraisal is the formal, systematic assessment of how well employees perform their jobs in relation to established standards (Huang, 2000). This was also identified in the literature as one of the most common HRM practices implemented by organisations. With regards to this HRM practice, the study found that the performance appraisal in 2004 was low across all breweries, however there was a year on year improvement from 2004 to 2006, with an average of 94.98%. Only one of the breweries managed to achieve the target of 100% in 2005.

6.1.1.4   Career Development

Career discussions and career programs are designed to help the employees of an organisation realise and reach their maximum potential. Internal career development and internal labour markets also affect firm performance (Delaney and Huselid, 1996). The scores that were achieved for career discussions were significantly lower than the target in 2004. In 2005, this improved for the majority of breweries, except Polokwane where a significant decline was noted. In 2006, only Ibhayi

exceeded the target of 90%. The average that was achieved was 66.195 which is very low.

Overall all breweries seem to have struggled to achieve their performance appraisal and career discussion targets while they have shown improvement in achieving their CAP and training and development targets. These are confirmed by the summary shown in Table 5. The mean offers a general overview of the data concerned and the standard deviation provides a dispersion of the data according to the variability of the data (Sekaran, 1992). The means and standard deviation of the HRM practices and business performance indicators were included in the empirical study because it provided information regarding the different dimensions and the ability or inability of the organisation to reach its targets.

The means for CAP, performance appraisal and career discussions were 79.14, 94.98 and 66.16 respectively. This indicates that the organisation is unable to achieve its HRM practices indicators various production regions vary in their ability to achieve their targets. The results show that the standard deviation with regards to CAP and career development was large with figures of 9.6 and 18.2 respectively which indicate a large variability in the results.

6.1.2 Business Performance Indicators

6.1.2.1   Customer Perspective

This dimension measures performance against criteria that are important to the organisation's customers and consumers (Kaplan and Norton, 1996). There was a year-on-year improvement with regards to the breweries trying to achieve the customer satisfaction variable of integrated quality management. All breweries initially struggled to reach their target during 2004 and 2005, however all breweries managed to exceed the target in 2006. The average IQMS obtained was 2.77 which was below the target of 2.8.

6.1.2.2   Internal Business Perspective

The analysis of efficiencies indicated that in 2004, three breweries exceeded the target of 85% while in 2005 only 1 brewery achieved a score higher than the target. In 2006, there was a significant decline amongst the majority of the breweries with only Ibhayi being able to exceed the target of 85%. The average that was obtained was 82.9 which is below the target of 85%. As this is the key indicator with regards to the internal business perspective as shown on the balanced scorecard (Kaplan and Norton, 1996), it is a concern that no production facility can achieve their targets.

6.1.2.3   Financial Perspective

This perspective which traditionally focuses on profitability, growth and shareholder value (Kaplan and Norton, 1996) measured the cost of each production facility. The financial perspective analysis showed that only

one brewery was able to consistently maintain costs to below R40.00 per hectolitre. Costs were highest at the Chamdor brewery, where there was a year-on-year escalation. The average cost was found to be R51.18.

6.1.2.4   Learning and Growth Perspective

Kaplan and Norton (1996) defined this perspective as the organisations ability to learn and adapt to the changing environment and included labour turnover. All the breweries exceeded the target of 5% with regard to the learning and growth perspective. Polokwane showed a consistently high degree of labour turnover. The results clearly show that there is a concern with labour turnover. The average turnover was found to be 10.8% which is double the target of 5%.

Overall all breweries seem to have struggled to achieve the targets set for the business performance indicators. These are confirmed by the summary shown in Table 5. The means and standard deviation of the HRM practices and business performance indicators were included in the empirical study because it provided information regarding the different dimensions and the ability or inability of the organisation to reach its targets.

The means for IQMS, efficiency, rands/hectolitre and turnover were 2.77, 82.92, 51.18 and 10.81 respectively. This indicates that the organisation is unable to achieve its business performance indicators. The results show that the standard deviation with regards to IQMS, rands/hectolitre

and turnover were relatively large with figures of 0.45, 17.94 and 5.35 respectively which indicate a large variability in the results.

6.2 Hypothesis Discussion

6.2.1 Path Analysis

Path analysis is a straightforward extension of multiple regressions. Its aim is to provide estimates of the magnitude and significance of hypothesised causal connections between sets of variables. For the purposes of this study, the causal connections of HRM practices on business performance were measured.

Although path analysis is a very popular analysis, it is important to bear in mind a cautionary note from Everitt and Dunn (1991): "However convincing, respectable and reasonable a path diagram... may appear, any causal inferences extracted are rarely more than a form of statistical fantasy". Basically, correlational data are still correlational. Within a given path diagram, path analysis can indicate which are the more important (and significant) paths, and this may have implications for the plausibility of pre-specified causal hypotheses.

Path analysis cannot indicate which of two distinct path diagrams is to be preferred, nor can it tell us whether the correlation between HRM practices and business performance represents a causal effect of HRM practices on business performance, a causal effect of business performance on HRM practices, mutual dependence on other variables

for the sake of the study defined as organisational effectiveness, or some mixture of these.

6.2.2 Correlation Tests

Correlation tests were done to determine if there are any relationships as defined by the above definition of path analysis. The correlation is 1 in the case of an increasing linear relationship, −1 in the case of a decreasing linear relationship, and some value in between in all other cases, indicating the degree of linear dependence between the variables. The closer the coefficient is to either −1 or 1, the stronger the correlation between the variables. If the variables are independent then the correlation is 0, but the converse is not true because the correlation coefficient detects only linear dependencies between two variables.

The results showed that the correlations between the HRM practices and the business performance are relatively low. The correlation between IQMS and performance appraisal and career development was found to be higher than average with 0.628 and 0.696, respectively. This suggests that the criterion for improving or ensuring customer satisfaction is career development and performance appraisal. This also implies that there is a relatively strong increasing linear relationship between the HRM practices of performance review and IQMS and as well as career discussion and IQMS.

These values obtained were found to be significant at the 0.05 significance level. That means that the risk of being wrong when rejecting the null hypothesis that the correlations are not significantly different from 0 is less than 5%. The corresponding p-values (the estimated risk) for performance appraisal and IQMS and career discussion and IQMS were 0.03 and 0.01 respectively. The lower p-values imply that the correlation is more different from 0. These tests are two-sided.

6.2.3 Correlation Map

The diagonal of a correlation map (i.e., the numbers that go from the upper left corner to the lower right) always consists of ones. That's because these are the correlations between each variable and itself (and a variable is always perfectly correlated with itself).

In every correlation map there are two triangles that are the values below and to the left of the diagonal (lower triangle) and above and to the right of the diagonal (upper triangle). The two triangles of a correlation map are always mirror images of each other. The correlation of variable x for the purposes of this study, HRM practices with variable y, business performance indicators is always equal to the correlation of variable y with variable x. When a map has this mirror-image quality above and below the diagonal we refer to it as a *symmetric matrix*. A correlation map is always a symmetric matrix.

Correlation maps allow to one visually identify patterns in correlations. This has a lot more meaning when there are many dimensions. The

research data was limited to 2 dimensions namely HRM practices and business performance thus providing limited dimensions on the correlation map.

The correlation map showed that there were negative associations, i.e. no casual connections exist between the variables, between the following HRM practices and business performance indicators:

Table 9: Negative associations between HRM practices and business performance

HRM PRACTICES	*BUSINESS PERFORMANCE*
Competency Acquisition Process	Rands/hectolitre and IQMS
Training & Development	Rands/hectolitre and Efficiency
Performance Appraisal	Turnover
Career Development	Turnover

The above results are indicative of the negative association between performance appraisal and turnover, career development and turnover, as well as, training and development and efficiency. Intuitively one would expect that performance appraisals and career discussions would positively impact on labour turnover. The literature also provided evidence to support the view that HRM practices increase employee

discretionary effort. An influence on turnover, productivity and corporate financial performance can be expected (Huselid, 1995; Tzafrir, 2005).

The correlation map showed that there were positive associations, i.e. illustration of casual connections exists between the variables, between the following HRM practices and business performance indicators:

Table 10: Positive associations between HRM practices and business performance

HRM PRACTICES	*BUSINESS PERFORMANCE*
CAP	Efficiency and Turnover
Training & Development	IQMS and Turnover
Performance Appraisal	IQMS, Efficiency & Rands/hectolitre
Career Development	IQMS, Efficiency & Rands/hectolitre

The results obtained above are consistent with the literature, has shown that HRM practices such as performance appraisals, career discussions, training and development, can ensure that employees perform above their maximum effort thus providing returns in excess of any relevant costs thus leading to enhanced firm performance. If HRM practices increase employee discretionary effort, one can expect an influence on turnover, productivity and corporate financial performance (Huselid, 1995; Delaney and Huselid, 1996; Paul and Anantharaman, 2003).

6.3   Research Questions

The initial question of the research sought to establish if there was a relationship between the human resource management practices and performance indicators of the production lines and what was the nature of the relationship? The results that were obtained indicated that there was indeed a relationship between certain HRM practices and business performance indicators. As shown in the above table, the HRM practices include competency acquisition process, training and development, performance appraisal and career development.

The performance indicators included IQMS, efficiency, rands per hectolitre and labour turnover. Although the study did establish that a positive relationship between HRM practices and business performance indicators does exist, it could not establish the direction of the relationship. The reason for this could be attributed to the limited amount of data.

The next question of the research sought to establish whether there is a relationship between human resources practices and organisational effectiveness and what was the nature of the relationship. The study found that no relationship exists between HRM practices and organisational effectiveness. According to the contingency theory perspective, HRM practices does enhance organisational performance however, organisational effectiveness is seen as a moderating variable (Paul and Anantharaman, 2003; Neal *et al,* 2005). Hence, the findings of

the research varied when compared to that of the literature. It would have been more effective in further breaking down the dimensions of organisational effectiveness and using these dimensions in the analysis.

The final question of the research sought to establish whether there was a relationship between organisational effectiveness and performance indicators. The study found that no relationship exists between organisational effectiveness and performance indicators. Paul and Anantharaman (2003) and Neal *et al* (2005) showed that organisational performance namely financial, employee retention, productivity, quality and speed of delivery were influenced by HRM practices via the intervening variables, however the research failed to establish such a relationship.

6.4   Conceptual Model

The research sought to develop a conceptual model that illustrated the relationship between HRM practices, organisational effectiveness and business performance. The model in chapter 3 assumed that such a relationship did in fact exist and it was directional. The results that were obtained illustrate a different relationship which is shown in Figure 18 below.

Figure 17: Conceptual Model of the relationship between HRM practices, organisational behaviour and business performance
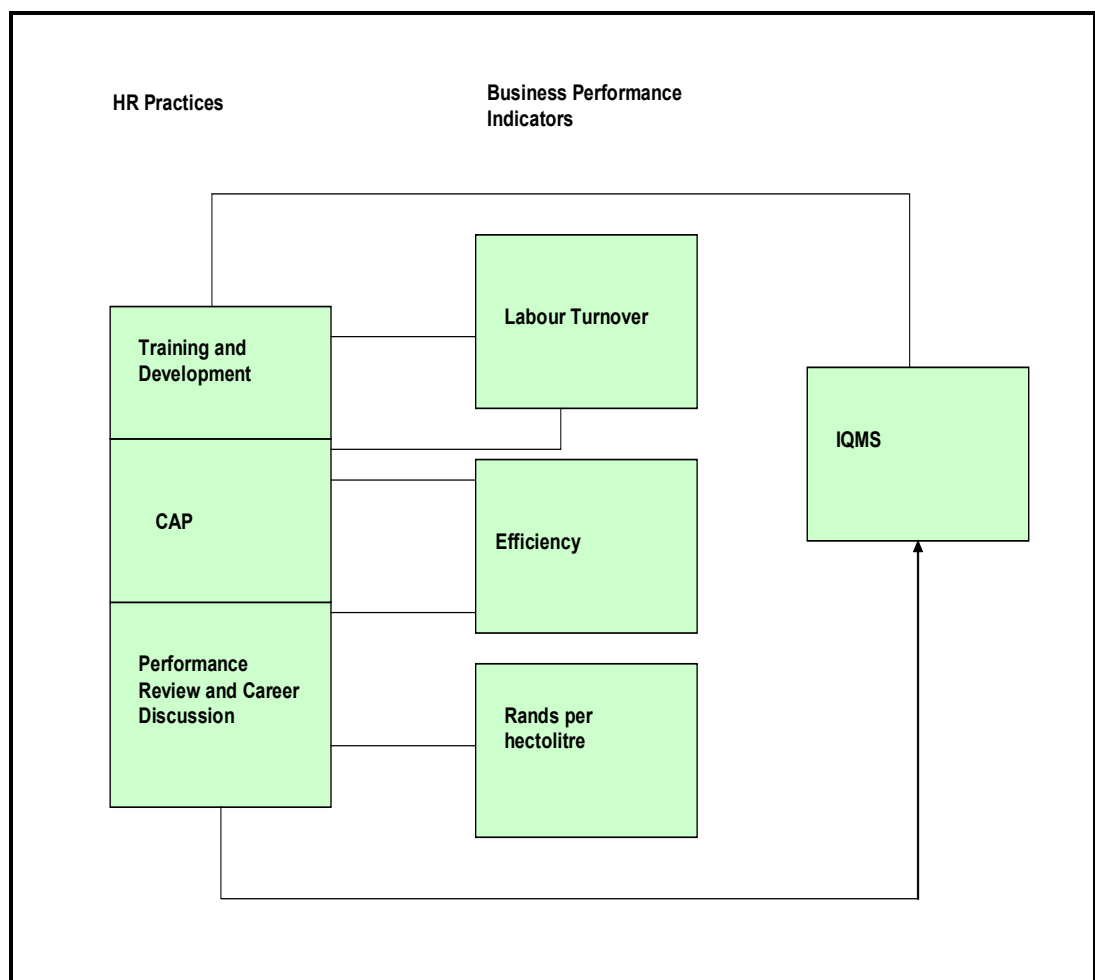
The results showed that the correlation between IQMS and performance appraisal and career development was found to be higher than average and that a casual relationship does exist. This suggests that the criterion for improving or ensuring customer satisfaction is career development and performance appraisals. This also implies that there is a relatively strong increasing linear relationship between the HRM practices of performance review and IQMS, as well as, career discussion and IQMS.

The study found no other casual relationships but it did find positive associations between HRM practices and business performance indicators as shown in the above model. The model attempts to link the relevant HRM practices with the associated business performance indicators but fails to show the direction of the relationship.

Whereas the assumed model as outlined in figure 6 showed that organisational effectiveness played a moderator role between HRM practices and business performance indicators, the conceptual model has excluded this variable. The primary reason for this was the lack of evidence to support the moderator role of organisational effectiveness in the relationship. However it must be stressed that this does not mean that organisational effectiveness does not have an influence in such a relationship and a different study might be able to establish such a relationship, provided that the sufficient number of data is available.

6.5   Summary

This chapter concludes the discussion and integration on the results as well as the conceptual model that has been derived from the results. Chapter 7 will focus on the recommendations, conclusions and limitations for the study.

CHAPTER 7:   **CONCLUSION**

Prior work has argued that there is a relationship between HRM practices and better business performance (Huselid, 1995; Chang and Huang, 2003; Khatri, 2000; Park *et al*, 2003). The literature identified the different schools and theories of HRM practices that can be implemented in an organisation. It emphasises the different types of HRM practices that organisations can implement namely best practices or bundles of HRM practices. The key success factor is to ensure that the HRM practices are aligned to business strategy and that it forms an integral part of the business.

The research found that while the organisation utilised the best practices approach, organisations should firstly understand their goals and then assess their HRM needs for the future proactively and decide which approach to implement.

The balanced view with regards to performance was definitely the preferred tool that was utilised in the literature. While some authors directly alluded to the balance scorecard as the tool to identify performance indicators, others used the concept in identifying the relevant performance indicators. The balanced scorecard (Kaplan and Norton, 1996) therefore provided the framework in which the performance of organisations can be effectively measured.

The research provided broad evidence in support of the literature that there is a relationship between HRM practices and improved business performance. The correlation map showed that there were positive associations between the independent and dependant variables. The moderator variable was shown to have no effect on the relationship between the independent and dependant variables. The primary reason for this could be the limited data that was available.

Overall the results suggested that HRM practices do have a relationship with business performance indicators. The research found that HRM practices which included CAP, training and development, career discussions and performance appraisals do have a relationship with business performance indicators namely cost, efficiency, labour turnover and quality however there was not enough evidence to support the direction of the relationship.

It is interesting to find that most HRM practices had not had a direct casual relationship to business performance indicators. The analysis shows that definite connections (both positive and negative) exist between the independent (HRM Practices) and dependent (Business Performance) variables. Among the HRM practices performance appraisal and career development has a direct casual relationship with the customer satisfaction perspective.

While the results indicated that there was no directional relationship between HRM practices and business performance indicators, findings of the research provide statistical evidence that investment in HRM practices of the firm will have a positive relationship with business performance. In conclusion although there were nine paths originating from HRM practices to the organisational performance indicators, only 2 HRM practices directly affects a single business performance indicator.

7.1. Recommendations and Limitations

It is recommended that additional inputs should be included to further investigate the causal connections between HRM Practices, Organisational Effectiveness and Business Performance as this was not possible with the existing data. This could take the form of either extending the research to include more organisations or in the case of this specific organisation, extend the study to its global operations.

In addition to this it is also recommended that the moderating variable of organisational effectiveness be broken down to its core dimensions of inspirational leadership, corporate reputation and work environment. These dimensions should then be viewed as separate moderating variables. This will provide for the larger data that was required for the analysis as well as help in understanding which dimensions have the most impact.

The research had the following limitations which can be looked at in future studies

1. The research was conducted in the manufacturing sector of the organisation and can not be generalised to other sectors of the organisation. This makes the research very focussed and difficult to extrapolate.

2. It is also limited to the organisation and cannot be generalised to either the fast moving consumer goods industry or other industries in South Africa. Hence future research could look at including other sectors so that a more generalised conclusion can be obtained.

3. The research did not establish causality among the variables that were measured. The results merely indicated that a relationship did exist but the direction of the relationship was not measured. As previously stated the primary reason for this could be the limited number of data. Future research would want to expand the current research to global plants within the current organisation or include different sectors from the South African economy.

4. There could be the subjectivity in of some of the measures. The measures may be company specific hence may enhance subjectivity. The particular measure in question is that of

organisational effectiveness which could The administering of the questionnaire can have self selection bias because people who feel strongly about the dimensions in the organisational effectiveness survey are more likely to fill in the survey. There could also be non response error and interviewer bias especially on the part of shift workers who maybe influenced by line managers.

7.3 Conclusion

Although there were limitations to the research, it can still be used in various different scenarios. The research can firstly be used by the organisation to understand how it is performing with regards to the various measures it has in place. The comparison can be made between production facilities over different financial years. Secondly and from an academic point of view the research established that there is in fact a relationship between HRM practices and business performance indicators which can be used for further research. Finally, the research provides a base from which further research can be performed on South African organisations.

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