THE DEVELOPMENT OF A HUMAN RESOURCE DEVELOPMENT STRATEGY FOR THE BORDER-KEI MOTOR INDUSTRY CLUSTER

BY

ANDRE MARITZ

Submitted to the Faculty of Management in accordance with the requirements of the degree

MAGISTER TECHNOLOGIAE (BUSINESS ADMINISTRATION)

at Port Elizabeth Technikon

PROMOTER: Mr T.S.Hutton

December 2000

PORT ELIZABETH

DECLARATION

I **Andre Maritz** hereby declare that:

THE DEVELOPMENT OF A HUMAN RESOURCE DEVELOPMENT STRATEGY FOR THE BORDER-KEI MOTOR INDUSTRY CLUSTER

is my own work and all sources used or quoted have been indicated and acknowledged by means of complete references. I have not previously submitted this thesis for a degree at another university or technikon.

_____ _____

A. Maritz Date

ACKNOWLEDGEMENTS

The successful completion of this study would have been impossible without the support, advice, assistance and encouragement of others. My sincere and grateful thanks are extended to all those individuals and organisations who contributed to the successful completion of this study. In particular, the assistance of the following is acknowledged:

- Mr Tim Hutton, my promoter, for being forever available to offer professional and constructive guidance, advice and motivation, irrespective of circumstance or distance.

- The staff of the MBA Unit at the Port Elizabeth Technikon for their help and support.

- My study group for their help, encouragement and support throughout the entire study.

- The respondents of the study who supplied the empirical data.

- My wife Heather for her patience, love and understanding during the entire study.

THE DEVELOPMENT OF A HUMAN RESOURCE DEVELOPMENT STRATEGY FOR THE BORDER-KEI MOTOR INDUSTRY CLUSTER

BY

ANDRE MARITZ

DEGREE : Magister Technologiae (Business Administration)

FACULTY : Management

PROMOTER : Mr T S Hutton

ABSTRACT

DaimlerChrysler's investment of R 1.4 billion in its East London Plant has resulted in the formation and development of an industry cluster, with DaimlerChrysler as the main industry driver. The rest of the cluster is made up of suppliers to the motor industry, as well as organisations involved in attracting and stimulating economic development in the region.

The investment by DaimlerChrysler signalled the entry of DaimlerChrysler South Africa (DCSA) into global markets, supplying right-hand drive C-Class vehicles to

the rest of the world. As a global player, world-class quality standards are expected of DCSA and, in turn, their suppliers. World-Class skills are therefore expected of the employees from all of the organisations within the cluster. This factor poses a challenge to South African organisations who are subjected to and challenged by the legislation that seeks to address and correct the societal imbalance of the past.

The research problem addressed in this study was two-fold. The first objective was to determine whether or not there was a competitive advantage to be gained by being part of an industry cluster. The second objective was to determine how suppliers to DCSA from within the cluster developed world-class skills despite the constraints imposed upon them by South African legislation. To achieve these objectives, a theoretical study was conducted on existing conditions within clusters worldwide, as well as on methods being implemented by global organisations to develop world-class skills.

An empirical study, covering the topics of competitive advantage and developing world-class skills, was developed and sent to suppliers of DCSA to test the degree of concurrence between methods implemented in the Border-Kei Motor Industry Cluster and global organisations elsewhere in the world. The results of the empirical study indicated a strong concurrence in many of the factors, and essentially only differed in instances where a cluster was more developed.

CONTENTS

PAGE

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION, PROBLEM STATEMENT AND DEFINITION OF CONCEPTS

TABLE OF CONTENTS

PAGE

PAGE

CHAPTER TWO

THE THEORY OF CLUSTERS

CHAPTER THREE

THE BORDER-KEI MOTOR INDUSTRY CLUSTER

PAGE

CHAPTER FOUR

THE DEVELOPMENT OF WORLD CLASS SKILLS AGAINST RELEVANT SOUTH AFRICAN LEGISLATION

PAGE

CHAPTER FIVE

THE EMPIRICAL STUDY, METHODS USED AND ANALYSIS OF DATA

LIST OF FIGURES

PAGE

LIST OF TABLES

LIST OF ANNEXURES

CHAPTER ONE

INTRODUCTION, PROBLEM STATEMENT AND DEFINITION OF CONCEPTS

1.1 INTRODUCTION

The opening up of global markets has resulted in a re-evaluation by South African organisations with regard to the manner in which they conduct business to become competitive. In addition to this, further international pressure is being brought to bear on South African organisations to comply with local labour legislation, which seeks to correct the injustices of the past, and adhere to international labour standards. The relevant legislation referred to is the Employment Equity Act and the Skills Development Levy Act.

Horwitz (1996:147) believes that investing in skills development across all organisational levels is as vital as recognising and rewarding managers who succesfully coach, train and develop their staff. This facilitates flexible career paths and encourage development through the allocation of real and meaningful responsibilities for employees. This, in turn, results in experiential learning of the core business. In order to achieve this organisations will need to review current human resource and organisational practices, and develop an understanding of the dynamics of diversity management.

Motor vehicle manufacturing is the largest industry in the Eastern Cape and comprises three international companies, namely; Daimler Chrysler South Africa, Delta Motor Corporation and Volkswagen South Africa. In the past two years, two out of these three local organisations have secured multi-million rand export contracts. As all of these companies boast about their emphasis being on local supply support, the effect of these exports on those organisations supplying components, parts and services to the motor industry is far reaching. In the light of this, the main problem for the research project is formulated below.

1.2. MAIN PROBLEM

The main problem to be researched is:

The development of a human resource development strategy for the Border-Kei Motor Industry.

1.3 SUB-PROBLEMS

In order to address the main problem, the following sub-problems have been identified.

1) How do clusters enhance the development of competitive advantage in an area.
2) What is revealed in the literature study as ways to develop world class skills and knowledge in the local workforce?

3) What do knowledgeable people feel are ways in which to develop a work class workforce in the Border-Kei Motor Industry Cluster?

4) What strategy can the Border-Kei Motor Industry Cluster adopt to develop world-class skills and knowledge in the workforce?

1.4 DELIMITATION OF RESEARCH

In order to ensure that the research project is manageable, it is necessary to demarcate the research to the areas listed below.

1.4.1 DEMARCATION OF ORGANISATIONS TO BE RESEARCHED

The scope of this research is limited to automotive component manufacturers in the East London, Berlin, King William's Town and surrounding industrial areas that make up the Border-Kei Motor Industry Cluster.

1.5 DEFINITION OF KEY TERMS

In order to clarify certain key terms, they are set out and discussed below.

1.5.1 INDUSTRY CLUSTER

Porter (1998:78) defines clusters as " geographic concentrations of interconnected companies and institutions in a particular field." They include suppliers of specialized inputs such as components, machinery and services. Porter (1998: 78) further states that clusters often extend downstream to channels and customers, and laterally, to manufacturers of complimentary products.

Porter (1998:79) claims that clusters promote both competition and co-operation. Rivals compete intensely to win and retain customers. Yet, there is also co-operation, much of it involving companies in related industries and local institutions. Competition, however, can co-exist with co-operation because they occur on different dimensions, and amongst different players. This co-operation is facilitated through the involvement of universities, training institutes and technical colleges working together with industry for the good of the entire region or industry cluster.

Porter (1998:80) believes that clusters affect competition in three broad ways, namely:

- By increasing the productivity of companies based in the area;
- By driving the direction and pace of innovation;
- By stimulating the formation of new businesses, which lead to a strengthening of the cluster itself.

In order to achieve competitive advantage, economies need to promote cluster formation. Porter (1998:86) states that one of the critical prerequisites in promoting cluster formation is by improving education and skills levels. Constantly changing technology pressurises industry through the creation of a demand for skills and knowledge that to be continiously developed to meet those new challenges brought about through the rapidly changing technological environment.

Historically, governments have had little to do with the actual formation of clusters as they occur naturally. It is vital however, that government play an important role in nurturing and reinforcing clusters.

Porter (1990:655) states that the most effective government contribution in the development of clusters, is through investments to create specialised factors, such as university technical institutes, training centres, data banks, and specialised infrastructure. Porter (1990:655) quotes examples of government involvement in Germany, where local governments are actively involved in supporting local educational institutions in projects tied to local firms and, The Research Triangle, in North Carolina .

Porter (1990:678), however, issues a warning regarding the role of Government, when he points out that "… an important caveat in any effort to set development priorities, no matter how well intentioned, is the difficulty of government

organisations to conduct the required analysis. Bureaucratic structures and political pressures create a setting ill-suited to objective choices."

The Border-Kei Motor Industry Cluster referred to is DaimlerChrysler, as well as the suppliers that service them in the Border-Kei region.

1.5.2 WORLD CLASS MANUFACTURING

Keating et al (1997), as quoted by Douwes Dekker (1998:3), states that world class manufacturing requires that the leaders of the organisation to have a particular mind-set devoted to the abolition of waste, and to continuous improvement beyond the "acceptable levels", or, mediocrity, which has been said to prevail in many manufacturing settings.

Problems within the workforce occur as a result of striving for continuous improvement, including:

- Inter-union conflict;
- Redundancies;
- Lack of worker participation.

Douwes Dekker (1998:3) confirms that issues have arisen and will continue to do so, on an increasing scale, in South Africa, and will include issues such as affirmative action.

1.5.3 CURRENT LABOUR LEGISLATION

For the purpose of this research project, current labour legislation refers to the following acts:

- The Employment Equity Act of 1998;
- The Skills Development Act No. 97 of 1998;
- The Skills Development Levies Act No. 9 of 1999.

1.5.4 COMPETITIVE ADVANTAGE

Competitive advantage refers to the availability of production inputs and an implementation strategy which results in the organisation being able to excel. Furthermore, if the strategy is successful, it should lead to the organisation being able to outperform competition.

1.5.5 WORLD CLASS SKILLS

Nearly every industry is experiencing rapid advancement in technology. This means that a highly skilled workforce is required to manufacture, service and repair the sophisticated products that are being manufactured. In turn this requires organisations to be proactive in continually investing in the training and developing of their workforce to achieve the level of world class skills necessary to attain competitive advantage.

1.6 THE SIGNIFICANCE OF THE RESEARCH

Porter (1990:9) cites human resources as being the most decisive factor in modern global competition. The problem facing the Border-Kei Motor Industry Cluster is the severe shortage of skills, as is documented by a recent study undertaken by the Human Sciences Resources Council (1999:1). Coupled to the skills shortage is the restriction on organisations to employ sufficient members of the designated previously disadvantaged groups, to ensure that the organisation meets the requirements of the Employment Equity Act.

The Acts on skills development are designed to encourage training and development of skills, but the attitude of organisation management towards these associated costs needs to be gauged.

It is imperative that organisations in this cluster come to terms with current legislation and achieve global competitivess to encourage further investment by the automobile manufacturers. The Border-Kei Motor Industry Cluster is already established, and growth has accompanied the securing of export contracts. There is very little research documented on this cluster and therefore the researcher feels that findings of this research project could assist theses organisations in their objective to become globally competitive.

1.7 MOTIVATION FOR THE RESEARCH - THE HSRC'S STUDY ON SKILLS SHORTAGES IN THE SOUTH AFRICAN LABOUR MARKET

A study by the Human Sciences Research Council (1999: 1-2) have revealed that there is a shortage of versatile, experienced and professional managers across all sectors of the South African economy.

The study revealed the following alarming statistics:

- 76 percent of the 273 organisations involved reported that they did not have adequate skilled human resources;
- 54 percent of 113 organisations involved reported that had difficulties in recruiting professional engineers;
- 25 percent of 65 organisations could not find engineering technicians;
- 50 percent of organisations employing IT professionals reported a need for more of them;
- Accounting and related professional skills were confirmed by 17percent of organisations researched;
- About 10 percent of organisations referred to the difficulties of recruiting black managers, professionals and artisans.

The laws of supply and demand dictate that when there is a shortage of a commodity, the price for that commodity rises. This has happened with regard to

certain skills, to the extent that many companies cannot afford them and, therefore, resolve to do without them, causing them to allegedly operate inefficiently.

1.8 RESEARCH DESIGN

This section contains the methodology to be followed in the research project.

1.8.1 LITERATURE STUDY

A literature study will be conducted in order to identify the benefits of an industry cluster to a demarcated area, as well as a study into the factors that are critical to the success of an industry cluster. In addition, the employment of skills within the confines of current labour legislation will be studied.

Literature will be gathered from libraries of the Border and Port Elizabeth Technikons, Rhodes University, University of Port Elizabeth, the Internet, the East London Chamber of Commerce and the motor companies in the Border-Kei Motor Industry Cluster.

1.8.2 EMPIRICAL STUDY

The empirical study will consist of the following parts:

- A sampling instrument in the form of a questionnaire developed by the researcher based on information gained from the literature study;
- A survey will be carried out in the demarcated area to determine the effectiveness of employing and developing skills within the confines of current labour legislation;
- The survey will be directed at general management, human resource management and training management;
- Postal surveys will be utilised because to the fact that Welman & Kruger (1999:153) cite the advantages of utilising postal surveys as being associated low costs, the respondent anonymity, and the fact that the respondent may complete the survey at their leisure.

1.8.3 DEVELOPMENT OF AN INTERGRATED MODEL

The results of the above literature study will be combined with the results of the empirical study to evaluate whether or not current labour legislation is effectively correcting past discriminatory imbalances, as well as to whether the new laws have led to an increase in training and development.

1.9 PROPOSED PROGRAMME OF STUDY

The research has been planned to include the following chapters:

CHAPTER 1	The problem statement, definition of key terms, the motivation for the research, methodology and the outline of the research project.
CHAPTER 2	An examination of the theory of clusters.
CHAPTER 3	An examination of the situation existing in the Border-Kei Motor Industry Cluster including the relevant organisations that make up a cluster infrastructure.
CHAPTER 4	A study of alternate methods of developing world class skills, as well a discussion on the relevant South African legislation.
CHAPTER 5	Design of the empirical study.
CHAPTER 6	Integration of the findings from the survey with the literature study in order to develop a model.
CHAPTER 7	Conclusions and recommendations.

SUMMARY

In this chapter, the problem statement was highlighted as were the sub problems to be discussed. Chapter two will analyse a cluster, components that make up its

infrastructure, the competitive advantage that can be achieved by being located in the cluster, as well as the necessary skills required to develop in a cluster.

CHAPTER TWO

THE THEORY OF CLUSTERS

2.1 INTRODUCTION

Global competitiveness has led to a change in the nature of the production function. Le Veen (1998:6) informs that production functions are becoming more decentralised, and more operations are being outsourced and contracted to outside firms. This, in turn, is opening up new niche markets and creating opportunities for smaller producers, which, functioning as a cluster, can help to improve the economic development of a region.

Generally, businesses have always located where it has suited them economically. These businesses have either tried to get close to their market, or to their major inputs such as labour, or an essential resource such as a harbour. This trend in cluster terms is now only followed by the anchor industry, for example the motor industry, with their related suppliers agonising whether or not it is essential to be in close proximity, or face the possibility of losing favour with its market. Obviously, the anchor industry will bring the necessary pressure to bear on essential related industries to operate in as close proximity as possible, so that they may encourage the transfer of information, knowledge and technology as part of their supply chain.

Le Veen quotes Doeringer and Terkla (1995:225) as having a very basic definition of an industry cluster, being "… geographical concentrations of industries that gain performance advantages through co-location." Porter (1990:151) claims that once a cluster forms, the whole group of industries become mutually supporting. Benefits flow forward, backward and horizontally. He continues by stating that interconnections within the cluster, often unanticipated, lead to the perception of new ways of competing and entirely new opportunities becoming available.

Porter (2000:17) states that "… more than single industries, clusters encompass an array of linked industries and other entities important to competition. In a cluster, suppliers of specialised machinery, components and services are able to be of value because the necessary demand for their expertise allows them to operate on the required economy of scale and achieve the level of efficiency which is a prerequisite for their customers to compete globally."

Le Veen (1998:2) lists three common themes in the definition of an industry cluster as being:

- Clusters are a dynamic phenomenon ;
- While geographic scope is important, there is no uniform definition of the geographic scope of a cluster ;
- Looking beyond individual industries and recognising that individual firms are part of a much larger industrial system.

Examples of clusters include Hollywood, Silicon Valley, the wine making industry of California and the Italian leather fashion cluster.

In this chapter, clusters will be discussed together with an explanation of a listing of the components that make up typical cluster infrastructures. A discussion will follow on the conflicting opinions of how clusters are developed, and how being part of a cluster can give an organisation a competitive advantage, even though opposition organisations are part of the same cluster.

Porter (1990:139) developed a diamond shaped diagram that illustrates the factors that contribute to national competitive advantage. This has become known as Porter's Diamond.

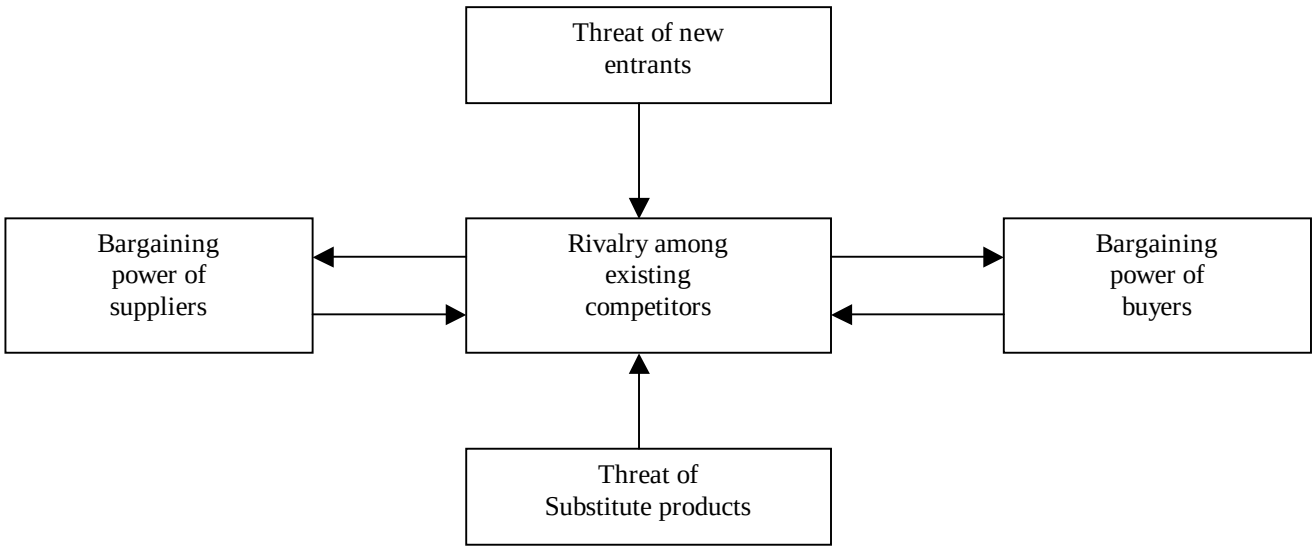
2.2 COMPETITIVE ADVANTAGE

Discussions on global competition are centered around how the individual organisation, and not how the region, competes with the rest of the world. These discussions should elaborate on the forces that yield competitive advantage in a region, and conditions that affect competitive advantage on a national level as they form and shape the competitive position of the individual firm. Individual and national competitive advantage will be discussed in the ensuing section.

2.2.1 INDIVIDUAL COMPETITIVE ADVANTAGE

Porter (1990:33) states that there are five basic competitive forces that influence the competitive environment in a region and it is these forces that lead to the development of a competitive advantage. The diagramme below (Figure 2.1) indicates how rivalry between competing firms is influenced by other forces. The organisation that most effectively uses these influences to its benefit will hold the the edge in the stakes for competitive advantage.

Figure 2.1 Porter's five forces that determine industry competitiveness



Source: Adapted from Porter (1990:35)

In Figure 2.1 above, the first of these forces is the *threat of new entrants*. Firms need to create barriers to entry in order to prevent potential competitors from

entering an industry and causing a possible oversupply or a low margin situation. Timmons (1999:92) lists some barriers to entry as being:

- Having proprietary protection, regulatory advantage, or other legal or contractual advantage;
- Having advantage in response or lead times in technology, product innovation, market innovation, people, location, resources, or capacity;
- Possession of well developed, high quality, accessible contracts that required years of building top-notch reputation.

The second force, namely the *Bargaining power of suppliers and buyers,* is a force that needs to be optimally utilised by efficient personel, as results pertaining to these negotiations have a direct influence on the margins of firms buying or selling.

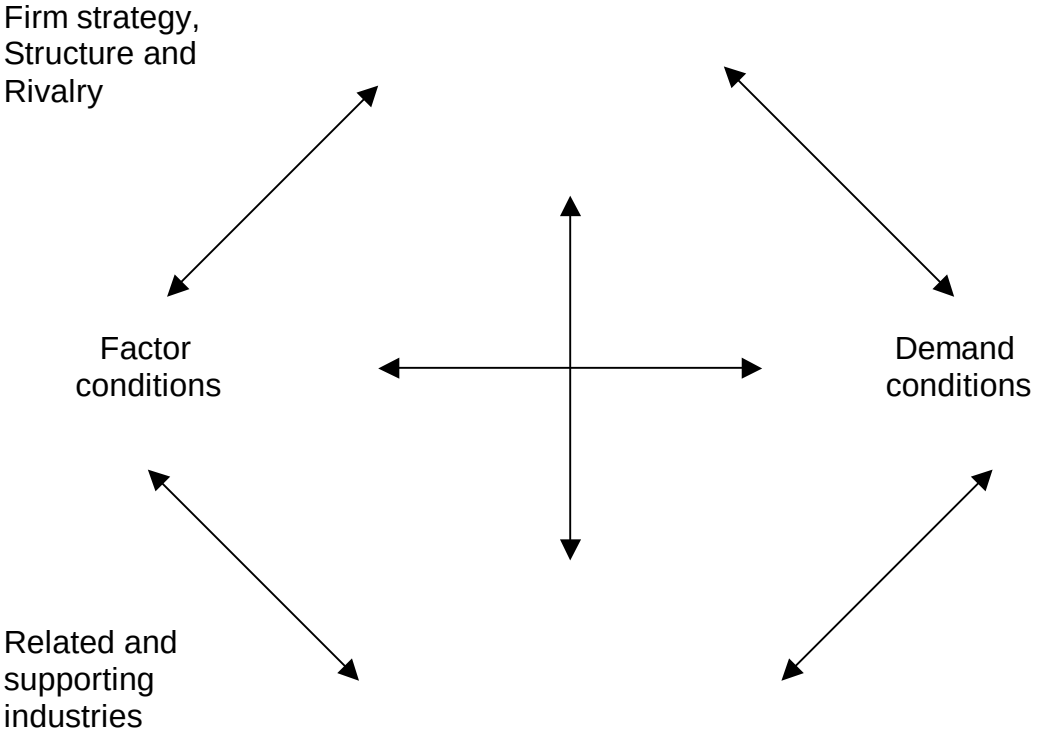
The third force, is identified as the *threat of substitute products or services.* With technology today, this is very real and could render firms obsolete overnight. Constant market research and reaction to information within the industry will determine the extent of this threat to the individual firm.

The final force refers to *Rivalry among existing competitors,* and is the ultimate reason why firms continually explore different ways of producing or offering their product or service to the market in an effort to capture or retain market share.

2.2.2 NATIONAL COMPETITIVE ADVANTAGE

To illustrate the factors contributing to national competitive advantage, Porter (1990:139) utilises a diagramme in the shape of a diamond. This diagramme is illustrated as follows:

Fig 2.2 Porter's diamond



Source: Porter (1990:139)

The diagramme above reflects the four basic factors that contribute to the organisation's competitive advantage resulting from their geographical position and the relationship between each factor. These factors will be explored as follows.

- FACTOR CONDITIONS

Factors of production are those inputs necessary to produce the goods or services in an industry, and are made up of land, labour, natural resources, infrastructure and capital.

When used in the context of factor conditions, these inputs are evaluated in the manner in which they are utilised. Even if a particular nation has an abundance of a quality resource, it will yield no comparitive advantage unless that resource is deployed efficiently. In fact, a country importing a resource could, theoretically, have a competitive advantage over the country of import, if it uses the resource more productively.

- DEMAND CONDITIONS

If local demand for a product pressurises the firm to continually innovate and add value, then that firm is in a good position to operate in a global market. Johnson and Scholes (1999:109) quote that the Japanese customers' high expectations of electrical and electronic equipment have provided an impetus for those industries in Japan.

- RELATED AND SUPPORTING INDUSTRIES

Johnson & Scholes (1999:110) state that one succesful industry may lead to advantages in related and supporting industries. They continue by citing the example of Italy, which has a vibrant leather footwear industry. This is supported by a leather working machinery industry and design services. A national firm operating in this environment will enjoy a competitive advantage over a similar firm in another nation.

- FIRM STRATEGY STRUCTURE AND RIVALRY

Certain countries are known for their expertise in certain industries, and it is often their unique approach and culture that has earned them this success and respect. The following countries have been succesful because of the way in which they have gone about defining work:

- Germany - The hierarchial management style of the Germans has been particularly successful in the engineering industries.
- Italy - Benetton, the Italian clothing giants, became succesful by marketing and networking their products to family owned manufacturers.

Johnson & Scholes (1999:111) indicate that Porter's diamond can be utilised firstly, by a government to consider what policies to implement to realise competitive

advantage, or secondly, by organisations attempting to build home-based advantages to create competitive advantage in relation to others on a global front.

2.3 CLUSTERS AND COMPETITIVE ADVANTAGE

Porter (1998:78) believes that clusters can increase competitive advantage in three ways, namely:

- Increasing the productivity of companies based in the area;
- Driving the direction and pace of innovation;
- Stimulating the formation of new business within the cluster.

Absorbing the facts above of the advantages of proximity can cause confusion, or at the very least, raise a few questions relating to the concept of a global village. Theoretically, the advantages of technology, faster transportation and communication should enable global markets to be accessed so efficiently that geographic proximity should not be as critical as has been advocated in clusters. Porter's (1998:78) stance on this paradox is that there are advantages that are difficult to tap from a distance, namely, the relationships, information and incentives derived from geographic, cultural, and institutional proximity. Porter (1998:78) continues by adding that "… competitive advantage lies increasingly in local things-knowledge, relationships, and motivation that distant rivals cannot replicate."

Although the motivation leading to an organisation's location then still hinges to a large extent on proximity of its major inputs, it is however being present in a cluster which forces one to continually find more productive uses of inputs to ensure competitive advantage.

2.4 CLUSTER GROWTH AND DEVELOPMENT

To attract firms in industry to strengthen an existing cluster, a marketing strategy has to be well directed. This means that the point of issue has to be based on specific advantages that will benefit the firm to enable natural growth within the cluster. Issues based on the price of inputs, legislation or culture will not entice competitive firms, as much as the opportunity to strengthen core competences. Anderson (1994:29) cites an example in Austin, Texas, where it was necessary to attract electronic firms. Instead of offering low cost labour or tax incentives, the strategy was rather to place emphasis on the material scientists, software engineers, and semiconductor technicians with pertinent training and experience who lived in the region. Anderson (1994:29) sums up recruitment by ascribing that the key point in the attraction effort has to hinge on the opportunities inherent within existing clusters, and the subsequent advantages the region offers to firms similar to those already thriving in the cluster.

A typical cluster infrastructure includes diverse information providers. Anderson,(1994:30) in discussing long term development strategies for clusters,

wrote that to achieve long term goals, an organisational framework has to be established, as well as a process to support ongoing development efforts. He continues that there should be a sustained, high level of collaboration among firms in the private sector, and between private corporations and public institutions.

Clusters take many years to develop, some of them ignorant of the term “cluster”, and were merely located in the area for similar reasons to their counterparts. As they developed, however, some of their respective governments and educational institutions recognised their future potential and, as a result, a typical cluster’s infrastructure now includes diverse information providers. Porter (1998:78) states that many clusters include governmental and other institutions such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations that provide specialised training, education, information, research, and technical support. These service providers will be expanded on in the section dealing with development and growth of clusters.

There are differences in the opinions related to the definition of a cluster, and various authors have their opinions on what factors lead to the growth and development of clusters.

However, a leading argument is the concept of company competition versus company collaboration. Porter (2000:25) states that clusters represent a combination of competition and co-operation. Rival companies are forced to

become innovative in order to be competitive, and as a result, new technology is created through increased research and development which forces the introduction of new skills and services. This leads to new business spin-offs.

In the collaboration argument, Le Veen (1998:4) quotes Doeringa and Terkla (1995) as advocating that the transfer of knowledge and technology among firms can lead to new industry growth, and therefore helps drive the overall growth of the cluster.

2.4.1 NECESSARY SKILLS DEVELOPMENT

As far back as 1990, Porter, felt that competitive advantage was derived from the availability of production inputs such as land, labour and capital. He further demonstrated this point by stating that competitive advantage is only attained with the efficient use of the production inputs. This means that it will take innovative management to maximise the utilisation of these inputs. These managers have to be regarded as human capital, as they are the assets of the organisation, containing human resources, information and knowledge which has to be shared across the management sphere and down the chain of command. (Porter 1990:74, Porter 1996:76). The challenge that emerges from the acceptance of the premise of the need for the development of human capital, is how that development should actually take place. Options on this issue have to revolve around either the use of education providers in the area in conjunction with the cluster, or in-house

training,(often by foreign staff members in the case of multinational organisations), or finally, a combination of both options.

Porter (1998:81) continues that in “vibrant clusters”, companies have the benefit of a pool of specialised and experienced employees who have developed personal relationships and trust in the community, which promotes the flow of information. The companies that operate in such clusters invest in the procurement and development of human capital, so that they can prosper within the cluster. With many firms following the same approach, soon there is a pool of specialised labour, with an understanding of the operations of the cluster.

2.5 WAITS’ DISCUSSION ON THE ARIZONA CLUSTER’S WORKFORCE DEVELOPMENT SYSTEM

The Arizona Strategic Partnership for Economic Development (ASPED) was formulated to address statewide growth and quality of life (Irwin 2000:1). It replaced Arizona’s old “Three C” economy of copper, cattle and climate, and the new state focus became 11 cluster industries.

Waits (2000: 13) reports that another major initiative to structure policies and programmes around Arizona’s industry clusters is the state’s new comprehensive plan for workforce development. Specifically, the plan provides for forecasting worker demand for Arizona’s clusters, identifying training programmes that do not currently prepare adults and youths for occupations in industry clusters, and

integrating cluster-identified occupational competencies into all training programmes in the future.

Waits (2000: 13), confirmed that two important steps set the plan in motion. They were as follows:

- The divisions of Workforce Development and School to work were transferred from the governor's office to the office coordinating the state's cluster strategy;
- The Department of Commerce completed a major reworking of the state's School to Work programme to give it an industry cluster focus.

2.6 CONCLUSION

From the information discussed in this chapter, the industry cluster approach seems to offer a more effective solution to economic growth than merely analysing an industry segment.

Porter's diamond listed the basic factors that contributed to a firm's competitive advantage as a result of its geographical position. These factors, demand conditions, factor conditions, related and supporting industries and the firm's strategy, structure and rivalry, endorse the research which listed the benefits of clusters in regional development.

Porter (1998:90) states that the diamond theory stresses how the aforementioned elements combine to produce a dynamic, stimulating, and intensely competitive

business environment. He continues by stating that a cluster is the manifestation of the diamond at work. Proximity – the co-location of companies, customers, and suppliers – amplifies all of the pressures to innovate and upgrade. This effectively answers the question posed by the first sub-problem, which questioned whether or not there is competitive advantage to be derived from being part of a cluster. The theory analysed confirms that there is competitive advantage to be derived if the aforementioned conditions are met.

Chapter Three will analyse the development of the Border-Kei Motor Industry Cluster with a brief synopsis of how it was stimulated to get to this point, and what the latest significant developments have been.

CHAPTER THREE

THE BORDER-KEI MOTOR INDUSTRY CLUSTER

3.1 INTRODUCTION

“The investment by DaimlerChrysler in South Africa has already been mirrored by investments totalling more than a R 1 billion by suppliers,” claimed DaimlerChrysler board member, Professor Jurgen Hubbert, at the official launch of the W203 in East London. Hubbert cited supply partners Bosch, Venture, Leoni, Becker and Lear as companies that have helped transfer world-class facilities to South Africa.
(Global Supplier 3,2000:6)

It took a paradigm shift of thinking to develop a process of attaining world class supply in South Africa. The procurement managers of four motor manufacturers, namely, Delta SA, BMWSA, VWSA and DCSA met in East London to explore common processes and to develop new paths together. Bernd Grau, head of procurement at DCSA, outlined the purpose of this meeting as being “ to support supply partners in becoming more competitive, to facilitate and promote know-how transfers and ensure more technological advantages through investments, joint ventures and alliances” (Global Supplier 3, 2000:14).

Proximity, then to the driver of the cluster, namely, DCSA in the case of the Border-Kei cluster, is vital if the above strategies are to be fulfilled. Grau believes that these

strategies can be applied with great success by suppliers in the Eastern Cape, because of their proximity in relation to each other (Global Supplier 3, 2000:14).

Based on supplier investment and DCSA strategy regarding suppliers, it stands to reason that an industry cluster is already at an advanced stage in its development. This chapter will begin with a short synopsis of the East London plant , the DaimlerChrysler merger, and then a study of the present cluster structure. The efforts of relevant parties that have enabled the cluster to reach this point will also be highlighted, and the chapter will close with a comparison of developments of this cluster versus the theory of clusters in chapter one.

3.2 UPGRADING THE EAST LONDON PLANT

The East London plant has been upgraded to supply 40 000 W203 vehicles to right hand drive countries including Japan, the United Kingdom and Australia. The plant has been re-engineered to streamline the range of vehicles built and will concentrate largely on W203 vehicles. As a result of this, the Honda range that has has produced for many years will not be manufactured in South Africa, but rather imported. By comparison, only 8427 W202 C-Class vehicles were produced in 1999 versus the 40 000 units a year envisaged by the plant now designed to specialise in the new W203. “This five-fold increase need not be the end of the investment and if the East London plant can prove itself to be a world class manufacturer, then

further investments are possible", claimed Professor Hubbert, at the launch of the W203. (Global Supplier 3,2000:6)

3.3 THE DAIMLER-BENZ / CHRYSLER MERGER

Daimler-Benz and Chrysler merged in 1999 as a result of the two company's strengths being on different sides of the world. This merger heralded the beginnings of a motor manufacturing giant with worldwide strategic strength.

Initially, all this merger had to offer DCSA (Daimler Chrysler South Africa) was the opportunity to market and sell a wider range of quality vehicles. There were advanced developments, however, for the East London manufacturing plant to become the only supplier of right hand C – Class Mercedes-Benz passenger vehicles. In many people's eyes, this was perhaps only a dream, if it is considered that East London lies in the Eastern Cape, one of the poorest provinces in South Africa. South Africa itself being in Africa, the least developed continent, is also placed unfavourably far away from major customer and supplier markets.

It is difficult to imagine that the existence of seven manufacturers in the motor industry in South Africa, totalling 314 000 in 1998 and 295 000 in 2000 is sustainable so manufacturers needed to look to exporting to be viable. (The

National Association Automotive Component and Allied Manufacturers). The total vehicles produced in South Africa in fact is less than the annual output of some single plants throughout the world.

Pressures of operating in a global economy also meant that a new working programme needed to be structured by industry and the government to move away from the protected and isolated conditions of the South African motor industry. As a result, an export incentive programme called the Motor Industry Development Program (MIDP), was developed to reward a manufacturer who exports. The MIDP grants import credits for each amount exported so the more a manufacturer exports, the more the company can import without paying tax. This suited DCSA as it wanted to import a whole range of Chrysler vehicles, which would not be affordable without a programme such as the MIDP.

3.4. THE R1.3 BILLION INVESTMENT

The East London DCSA plant attained quality levels required to produce the C-Class (W203) for world wide use, but the task remained to find a world wide supplier base and the additional skilled staff to support the increased volumes.

3.4.1 SUPPLIER REQUIREMENTS

At a supplier forum held in East London in the first quarter of 2000, 220 German and South African delegates were advised that DCSA wanted to localise its material costs with local value added. Modzelewski (Global Supplier 1, 2000:5) stated that local content is a reflection of the ability as a supplier in South Africa. DCSA expected to drastically reduce stock levels and have 100 percent supplier reliability at all times. He continued by inviting suppliers to make the journey together with DCSA, stressing persistance, discipline, speed, and teamwork as being essential ingredients to success. This was, in fact, outlining the integrated supply policy that DCSA were advocating.

The message outlined in the supply policy, then, is that a supplier could enjoy substantive benefits with its association with DCSA, if it was uncompromisingly committed to the best cost, quality, cycle time and technology. Suppliers would have to:

- Adapt to DCSA's systems and processes to optimise the supply chain;
- Accept intergration as the operative word;
- Be located suitably to conform to JIT strategies and continous improvement exercises, including research and development.

3.4.2 TRAINING AND DEVELOPMENT OF WORLD CLASS SKILLS TO SUPPORT THE INVESTMENT

DCSA advertised in East London for the 800 hourly paid vacancies it had to support the W203 increased volumes and received some 45 000 responses. These 45 000 were screened, and 3 000 candidates were shortlisted for training.

The DCSA Star (July 2000:6) reports that the applications received were for welders, assemblers, paintshop operators, material handlers, artisans and spraypainters. According to the report, the 3 000 on the shortlist went through the following assessments to review the suitability:

- A Situational Specific Evaluation Expert (SPEEX) test, conducted by the Department of Labour to assess trainability and potential of the candidates for specific jobs;
- A health examination conducted by the Border Occupational Health Association, which did not include any blood tests;
- Eleven days off-line training conducted by the Border Training Centre in eight core modules where skills levels and ability to learn are assessed more closely. The candidates are paid an allowance from this stage;
- Successful candidates spent a further six weeks in the plant doing on-line training, and a job offer was made, if successful;
- Unsuccessful candidates are assisted in finding employment within the region.

In a further step towards building world-class skills, a W203 Training Island teaching employees product assembly operations, was introduced because of it's potential to reach a large number of employees. A DaimlerChrysler Operating Model (DCOM) team recently introduced some of it's principles into the Training Island programme, such as signs, labelling, floor markings, foot printing and performance measurement which all help to create an immediate visual means of identifying problems (The DCSA Star – July 2000: 4)

In a move to guarantee the supply of skills for themselves and the cluster, Human Resources Development and Training Manager, Alan Eyre, invited suppliers to approach him for assistance. Eyre offers suppliers to DCSA, the service of matching skills with their database of 44 000 screened applicants, and also informs that DCSA's Technical Training Centre is a recognised skills provider, which means that suppliers could claim back a percentage of the costs of training and development.

3.5 INITIATIVES STIMULATING THE BORDER-KEI MOTOR INDUSTRY CLUSTER

Attracting foreign investment to an area is a complex process, as that investor normally has several alternative options globally to evaluate. A particular area then needs important organisations which firstly, make the investment attractive, and

secondly, provide a service for the implementation of the investment to run as smoothly as possible. The following are such organisations.

3.5.1 THE BORDER-KEI CHAMBER OF BUSINESS

It was envisaged that the spin-off created by the R 1.3 Billion investment by DCSA, and their resultant supplier policy outlined above, would create large scale investment by suppliers situated in the region, as well as suppliers locating to East London from areas in South Africa and abroad, to join the cluster. The Border-Kei Chamber of Business (BKCOB) set up a facility to provide information to prospective suppliers in terms of legal and business related information.

Special Projects Co-ordinator, Eva Schoof, was seconded to the BKCOB by DCSA. Schoof outlined her role as " …assisting prospective suppliers with information on work permits, import/export registration, industrial relations advice, labour recruitment, applications for incentives and networking with existing businesses and service providers." Shoof continued by adding that, important information could be supplied, such as economic statistics for the region, municipal rates and service charges, energy tariffs and specifications, accommodation and transport costs.
Hi-Lite (November 2000:14).

3.5.2 THE CENTRE FOR INVESTMENT AND MARKETING IN THE EASTERN CAPE (CIMEC)

The government created CIMEC as part of the national strategy of economic growth and development, specifically to control the investment promotion framework. CIMEC works with local councils, government departments and other investment agencies. The centre evaluates projects and those believed to be viable are promoted. Thus, companies wishing to invest in a particular industry would apply to CIMEC, and if successful, CIMEC would act as a facilitator and network the company to the relevant organisations.

The East London Focus (2000/01:18) informs that CIMEC is a focal entry point to potential investors for initial enquiry, entry and establishment, as well as expansion and support in the Eastern Cape. This report adds that the centre plays an active role in matching potential joint venture partners from abroad with local industries and entrepreneurs. CIMEC also assists industrialists in applying for loans to finance manufacturing ventures, through the Industrial Development Corporation, who offer specific finance facilities, such as:

- Finance for the manufacturing operations of an exporter for the acquisition of plant and equipment;
- Credit facilities for the export of capital goods and services;

- Low interest rates for finance relating to acquiring fixed assets utilised in the creation of new production directed at exporting.

3.5.3 THE SOUTH AFRICAN DEPARTMENT OF TRADE AND INDUSTRY

The Department of Trade and Industry developed an initiative in East London called the Industrial Development Zone (IDZ). The objective of this initiative is to encourage economic growth by attracting foreign investment in industrial development.

The East London Focus (2000/01:56) lists the following incentives of being part of the IDZ:

- Duty free status for imported raw materials;
- Easy access to port and airport facilities;
- World class infrastructure and services;
- Latest information technology;
- An IDZ management company to streamline administration.

The IDZ is not aimed at any particular industry, and besides the motor industry, lists textiles, clothing, food processing, petrochemical, forestry and tourism as key sectors for investment. The main objective of the IDZ, then, is listed in the East London Focus (2000/01:58) as being, "… to secure sustainable industrial orientated

projects that support such development that would lead to the commencement of other downstream activities, with satellite manufacturers developed around the main core functions."

3.5.4 PORTNET'S CONTRIBUTION TO THE CLUSTER

Exporting to all the W203 right-hand drive countries throughout the world requires world class export facilities. Portnet, the parastatal which operates all South African deepsea harbours, recognised this fact and, as a result, committed itself to investing R 112 million to build a car terminal and upgrade its container handling facilities to cope with DCSA's exports from the company's nearby manufacturing plant. Further motivation of this investment is that Portnet are actively pursuing business from other South African manufacturers exporting their vehicles, notably, Volkswagen and BMW. As the four level terminal will be the most sophisticated in Africa, and coupled to the MIDP incentive recently launched, the East London port is ideally placed to service this market (Global Supplier 1, 2000:8)

The Global Supplier 1 (2000:8) lists details of the investment as being:

- The four-tier car terminal, providing 1900 parking bays, will be linked by a bridge to the DaimlerChrysler plant;

- The container facility on the East Bank expanding to handle 90 000 twenty-foot units a year, which is higher than the current 60 000 units.

Port Operations Manager of the Port of East London, Nosipho Damasane, is quoted as saying that the project had awakened the harbour management to the realities of globalisation. Damasane continued,“ World-class export facilities readily available to the Eastern Cape region’s motor industry giants, creates business opportunities which can only serve to strengthen the economy of the region, and the country as a whole.”(Global Supplier 1, 2000:8).

In a further contribution to the stimulation of the cluster, the city council contributed R 22 million in electricity upgrades for DCSA’s project and will continue to play its part in the future. The city council will furthermore be applying for the West Bank industrial area to be declared an Industrial Development Zone. This area is in close proximity to the DCSA plant and the intention is that some of the industries downstream from the DCSA investment will locate in this zone.

3.6 SUPPLIER INITIATIVES AND INVESTMENTS IN THE CLUSTER

The theory in Chapter two indicated that a cluster develops as the partnership between the cluster driver and related suppliers develop. In the case of the Border-Kei cluster, DCSA decided on the investment, knowing that its current global partners would follow, in the interests of the partnership. The content under this heading will discuss some of these investments as well as innovations that have become part of the infrastructure of this cluster.

3.6.1 THE INDUSTRIAL PARK

Taking the concept of an industry cluster one step further, an industrial park has been established to move suppliers closer to manufacturing activities. The Industrial Park concept, which has been used to good effect in DaimlerChrysler plants in Germany, France and Brazil, will see systems suppliers setting up their assembly lines much closer to the vehicle assembly lines (Global Supplier 1,2000:13).

The rationale behind the park is that there are savings for the supplier, such as the low costs of premises, transport and less risk of damage before delivery. These savings then become resultant savings to DCSA , which is directly in line with their integration policy.

Johnson Controls has been the first supplier to locate to the industrial park. Johnson Controls have just 180 minutes to supply a custom built W203 cockpit to the line- hence, their need to be in close proximity. Johnson Controls also need to be able to respond quickly to DCSA's manufacturing requirements because an emergency could spark off a change in the manufacturing schedule which would result in an alteration to their own schedule. A big advantage is that Johnson Controls are linked to the Electronic Data Interchange (EDI) at DCSA and can observe the DCSA schedule and synchronise the production schedule accordingly (Global Supplier 2, 2000:7).

A worldwide philosophy of Johnson Controls is that there needs to be a presence in the plants of major customers where seats are built for Ford, and in Uitenhage, where front ends are manufactured for Volkswagen. Johnson Controls follow this policy as well as in a further 500 locations worldwide. It is the intention of Johnson Controls to increase their business with DCSA by manufacturing their frontends as well, and by being in close proximity, can undergo trials in partnership with the expertise available from DCSA (Global Supplier 2, 2000:7).

3.6.2 OUTSOURCING MATERIAL HANDLING

Keeping in line with the trend globally of outsourcing non-core business activities, DCSA has appointed Co-ordinated Material Handling (CMH) to take over receiving, storage and line feeding. CMH will be positioned on-site at DCSA and all local parts

(excluding JIT items) will be delivered to them. DCSA's Logistic Co-ordinator, Hennie Venter, stated that extensive studies have shown that if a company's core competency is so highly focussed in one area, such as material handling, it invests its resources and effort in that area and is more efficient and effective. It was his view that substantial savings could be made through this venture which again makes DCSA more competitive worldwide (Global Supplier 1,2000:12).

3.6.3 EUROTYPE TEST CENTRE

The Eurotype Test Centre provides the South African motor industry with a state-of-the-art testing centre which can meet all the exhaust emission auditing requirements of Europe, the United States, and Japan (Global Supplier 3, 2000:9). The centre was built as a partnership between DCSA and the South African Bureau of Standards (SABS). At present, the centre has the support of both DCSA and BMWSA, but is also hoping to gain the business of other South African manufacturers that export. The Managing Director of BMWSA, Ian Robertson, said that if his company were to export some 30 000 vehicles a year from South Africa, it was vital to be globally recognised as being world class (The DCSA Star – August 2000).

The Managing Director of Eurotype, Eugene Julies, believes that because South Africa intends introducing similar emission control legislation to that in Europe, the

United States and Japan, the centre now becomes vital for all local manufacturers aiming to export vehicles.

3.6.4 LEONI WIRING

International company, Leoni Wiring, specialises in manufacturing wiring harnesses to the motor industry and supplies DCSA, Volkswagen, Audi and Delta. Leoni consider themselves one of the pioneers of the industry cluster in that they were one of the first suppliers to invest in a manufacturing operation to support the DCSA W203 project.

The wiring harnesses are referred to as a JIT item, which has added pressure onto the already complex task of producing this technologically advanced harness, which is linked to the car's electrical system. The harnesses are supplied through the industry cluster in a JIT sequence to Johnson Controls, who manufacture the cockpit, also in JIT sequence, onto the assembly line. Already integrated into the DCSA scheduling system, Leoni receive advance forecasts on what to make, but only have two days to deliver once the order has been placed.

Frank Runkel, Leoni Wiring's General Manger, claims that it was considered impractical to supply DCSA from Uitenhage because of JIT requirements, and that the viability of the plant had increased with export orders, supplying W203 plants in

Sindelfingen and Bremen to DaimlerChrysler Germany (DCAG) (Global Supplier 3, 2000:19).

Leoni employs 260 people, 70 of whom are monthly paid, and a top priority is placed on **skills training and development** because of the high degree of variation and the critical need for zero defect. This training takes place on site in a training and assessment centre, and due to these skills obtained, have gained certification for both QS9000 and VDA6 quality systems in only their first six months of operation (Global Supplier 3, 2000:19).

3.6.5 VENTURE

In an interview with Carlo Bocchi, Logistics Manager of Venture, it was explained that Venture South Africa supplies moulded and painted components to the motor industry locally and abroad. The main customer of the East London plant is DCSA and for the W203 project, Venture have invested R 30 million for the installation of two moulding machines, and a further R 100 million on the plant, which involved the introduction of waterborne paint technology on plastic components. Again, to qualify to supply DCSA, Venture had to manufacture to the stringent requirements of ISO 14 000 certification, which they have succesfully achieved.

Bocchi continued by stating that Venture presently import the moulded parts for DCSA from a DCAG approved supplier, Rehau, and paint and assemble the parts

to suit the relevant models being manufactured. Towards the end of the year, Venture will be supplying direct from the East London plant, and form a major part of the DCSA localisation programme. Venture are connected by EDI to DCSA and it is through this medium that it receives its production schedule.

3.7 CONCLUSION

Operating successfully in a global economy requires optimal levels of efficiency resulting in quality standards being accepted universally. For DCSA, this challenge requires them to demand the same standards of their suppliers. Of the suppliers researched in this study, all of them had international certification, such as the ISO 9000 series. Helriegal, Jackson and Slocum (114:1999) informs that the ISO series of quality management has been adopted by 90 countries worldwide after being published by the International Organisation for Standardisation in 1987. More importantly, Helriegal et al (114:1999) inform that the ISO series applies to product design, process control, inspection and testing, purchasing, after-sales service, and training. While it is lucrative being a major component supplier to a motor industry giant, achieving this necessary certification can be regarded as a barrier to entry in this market, especially if it is an inherent characteristic of the cluster.

Activities in the Border-Kei Cluster indicate that there are more forces at work affecting an industry cluster than the forces of demand and supply. The Border-Kei Cluster is stimulated by the initiatives of key players such as the government and

business bodies, who create a climate conducive to encouraging investment in a certain region, and also by encouraging foreign investment in a manner which is less daunting than going through the process alone.

The Border-Kei Motor Industry Cluster's infrastructure is well advanced as the necessary inputs are in place. Most importantly now, what remains is the continuous development of human capital to ensure optimal utilisation of the facilities, and processes needed to be world class.

CHAPTER FOUR

THE DEVELOPMENT OF WORLD CLASS SKILLS AGAINST RELEVANT SOUTH AFRICAN LEGISLATION

4.1 INTRODUCTION

McMorrow (1999:7) states that the questions foremost in the minds of corporate and human resources leaders, when faced with human capital investments are:

- How will the workplace change?
- What will be the new role of training and human resources?
- Will technology play a bigger role in the development of people?
- How will all of these issues affect individual careers?

Managers of South African companies competing globally have an additional factor to consider when compiling a workforce, and that is striving for competitive advantage while adhering to South African labour legislation. The Employment Equity Act (Act 55 of 1998) seeks to address the imbalance of diversity and inequality in the employment of a workforce. In short, the act encourages the appointment of women, people from previously disadvantaged groups, and disabled people.

The Skills Development Act (Act 97 of 1998) was promulgated to encourage the development of the workforce in South Africa. This, together with the Skills Development Levies Act, ensures that funds are collected in order to facilitate a

growth in investment by organisations in human capital. Organisations pay a percentage of their payrolls to the South African Revenue Services, and a portion may be claimed back if training has been approved by the Section Education and Training Authority (SETA) to which the organisation belongs.

South African companies are already notorious for low levels of productivity throughout the economy. They are now being forced to employ workers on criteria not entirely based on skills and job suitability, but rather individuals having the "potential to succeed", which is making the task of becoming "world class" daunting. Herholdt and Marx (1999:62) believe that affirmative action can have a positive and negative effect on an organisation's productivity, depending on whose productivity is being considered. A problem with affirmative action, they continue, is that whites are almost always negative about affirmative action, whilst those benefiting from the affirmative action may become complacent, as they believe they will be promoted automatically without necessarily having to perform. The last group, Herholdt and Marx (1999:62) state, are the previously disadvantaged groups that are not chosen for advancement and are, therefore, not productive.

Business has not questioned the merits of the legislation, but rather the speed at which the laws are expected to be introduced. It must be remembered that the world will not repeatedly make concessions for South Africa, because the country is being seen as doing the right thing by addressing past imbalances.

The content section of this chapter will begin with a brief on affirmative action, followed by a synopsis of the three laws mentioned in this introduction, as well as study of what global companies believe are methods to develop world class skills. The objective of this chapter is to find methods to develop world class skills whilst conforming to South African labour legislation.

4.2 AFFIRMATIVE ACTION

Mbigi and Maree (1995:93) state that the extent to which the current political dispensation will be successful will depend on management of the high expectations of the black population for improved quality of life on the one hand, and addressing the white negative fears on the other hand. In reality, Mbigi and Maree (1995:94) question how a resource minority of 15 percent whites with a threatened power base can absorb an 85 percent poverty-stricken majority. Mbigi and Maree (1995:95) continue by suggesting that the following key issues need to be addressed at government or company level when dealing with an affirmative action programme:

- **The principle of transparency and accountability:** Businesses must disclose relevant information and insist on the accountability of those who make decisions.
- **The principle of partnership with black business and vendors:** Blacks own less than four percent of the national assets in this country and therefore black economic empowerment should be an

important aspect of an affirmative action policy at both government and company level.

- **The principle of inclusivity:** This would necessitate the appointment of black and union directors on company boards.
- **Black Managers and directors in decision-making structures:** Ensure that employees from the previously disadvantaged groups are promoted and empowered with the authority that goes with the position.
- **Worker empowerment:** Employees at all levels should be empowered and developed in terms of constant skills acquisition. Career pathing, vertical multiskilling and recognition of prior learning are also important.
- **Accelerated development and mobility:** Training and development programmes must be implemented, and there must be serious intention to promote the individuals from the previously disadvantaged groups.

4.3 EMPLOYMENT EQUITY ACT (ACT 55 OF 1998)

Pons and Deale (1998:18-3) state that policies and legislation aimed at Employment Equity have been borne out of the deep economic social inequalities that persisted in South Africa. Pons and Deale (1998:18-3) add that these

inequalities are extreme, and that there are few people who would argue that defined affirmative steps needed to be taken to develop a social fabric which ensures greater stability.

In the light of the social inequalities and the need to correct the imbalances of the past, the newly elected democratic government of South Africa of 1994 realised that it had to introduce legislation that would address equal opportunity and unfair discrimination in the workplace that had persisted for decades. This resulted in the promulgation of the Employment Equity Act (Act 55 of 1998) in October 1998.

People Inc.(1999:11), quote the requirement of the act as being "… to tackle the quantitative and qualitative aspects of discrimination and disadvantage, so getting numbers of the right people in place will not be enough. The company must provide equality of opportunity into the future through its policies and procedures, and through an informed, aligned and supportive workforce and management."

The purpose of the Act is to achieve equity in the workplace by:

- Promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination;
- Implementing affirmative action measures to redress the disadvantages in employment experienced by designated groups, in order to ensure their

equitable representation in all occupational categories and levels in the workforce.

A **designated employer** refers to an employer who employs fifty or more employees or an employer that employs less than fifty employees, but has an annual turnover that is greater than R 10 million (in the manufacturing sector)
The **designated group** refers to black people, women, and people with disabilities.
Black people refers to African, Coloured and Indians, and excludes Asian males.

Chapter Two of the Act prohibits unfair discrimination as discrimination either directly or indirectly against an employee in any employment policy or practice, on one or more grounds including race, gender, sex, pregnancy, marital status, family responsibility, ethnic or social origin, sexual orientation, age, disability, religion, HIV status, conscience, belief, political opinion, culture, language and birth. This chapter also states the prohibiting of:

- Medical testing of an employee unless legislation permits.
- Psychometric testing or similar assessment unless it is proved to be scientifically shown to be valid and reliable for intended purpose, can be applied fairly to all employees, and is not biased against persons from designated groups.

Chapter Three of the Act states that designated employers must implement affirmative action measures for designated groups to achieve employment equity. In order to achieve this, the employer must:

- consult with employees;
- conduct an analysis;
- prepare an employment equity plan;
- report on the progress made in the implementation of the plan to the Director General.

Chapter four applies to the monitoring, enforcing and legal procedures and outlines who has the power to inspect a company' s plan, who can enforce a company to comply, and forms of legal action which can be instituted against a company that does not comply.

4.4 THE SKILLS DEVELOPMENT ACT (ACT 97 OF 1998)

The National Skills Authority (2000:2) lists two objectives of the Skills Development Act and the Skills Development Levies Act. The first is the ever-present reality of the global economy and the priority to increase skills within the country to improve productivity and the competitiveness of its industry, business, commerce and services. The report lists the second priority as addressing the challenges of an unequal society, making it more inclusive and to encourage greater cohesion.

Based on the above, the National Skills Authority has formulated its mission statement as follows:

"… to equip South Africa with the skills to succeed in the global market and to offer opportunities to individuals and communities for self-advancement to enable them to play a productive role in society" National Skills Authority (2000:2).

Every employer in South Africa who is registered with the South African Revenue Services for Pay As You Earn (PAYE) or has a annual payroll in excess of two hundred and fifty thousand rand is liable to pay the levy to the respective organisations Section Education and Training Authority (SETA). The current amount payable for the period 1 April 2000 to 31 March 2001 is half a percent of the total remuneration paid to employees. This levy will increase to one percent from the second year and onwards.

The primary purpose of this Act is:

- To develop the skills of the South African workforce, to improve the quality of life of workers, their prospects of work and labour mobility. This will lead to improved productivity in the workplace and the competitiveness of employers. Self-employment will follow and the delivery of social services will improve;
- To increase the levels of investment in education and training in the labour market and to improve the return on investment;

- To encourage employers to use the workplace as a learning environment and provide their employees with the opportunities to acquire new skills. Employers should look to provide opportunities for new entrants to the labour market in order that they can gain work experience and where possible employ persons who find it difficult to be employed;
- To encourage workers to participate in learnership and other training programmes;
- To improve the employment prospects of persons previously disadvantaged by unfair discrimination, and to redress those disadvantages through training and education;
- To ensure the quality of education and training in and for the workplace.
- To assist work-seekers to find work and retrenched workers to re-enter the labour market;
- To provide and regulate employment services.

4.5 THE SKILLS DEVELOPMENT LEVIES ACT (ACT 9 OF 1999)

The Skills Development Levies Act works in conjunction with the Skills Development Act and its purpose is to provide for the imposition of a skills development levy**.** Every employer in South Africa who is registered with the South African Revenue Services for Pay As You Earn (PAYE) or has an annual payroll in excess of two hundred and fifty thousand rand is liable to pay the levy to their

respective Section Education and Training Authority (SETA). The current amount payable for the period 1 April 2000 to 31 March 2001 is half a percent of the total remuneration paid to employees. This levy will increase to one percent from the second year and onwards.

The Department of Labour states that the purpose of the levy is to expand the knowledge and competencies of the labour force, resulting in improvements in employability and productivity. The department's view is that, if a company participates fully in the system, then it will reap the benefits of having a more skilled and productive workforce.

4.6 NOBLE'S OBSERVATIONS ON THE OBLIGATIONS IN TERMS OF THE SKILLS DEVELOPMENT ACT

Globalisation has resulted in firms no longer competing solely against national concerns but also internationally for a share of local business that was traditionally guaranteed, despite the inefficiencies of the local suppliers.

Noble (2000:46), highlights a factor which compounds the above problem as being that South Africa has between eight and eleven million people who are considered unemployable, as they are categorised as functionally illiterate or unskilled. Furthermore, Noble (2000:46) claims that there is a need to participate in a global economy, but South Africa ranks poorly in terms of the ability to develop people.

The Skills Development Act (Act No 97 of 1998) and the Skills Development Levies Act (Act No 9 of 1999) are legislation enacted by government in an attempt to ensure that employees skills are developed and that the disadvantaged groups are represented at all occupational levels within an organisation, thus ensuring equity in the workplace.

The Skills Development Levies Act creates the basis for a mechanism of funding to increase the level of investment in education and training. Noble (2000:46) lists the regulation of this Act as follows: In terms of this act, business is required to pay half a percent of total remuneration to the South African Revenue Service. 80 percent of these collections will be used to fund training within the relevant industry.

Furthermore, Noble (2000:46) continues by stating that business may recover 50 percent of this levy if it meets the following criteria:

- The employer must appoint a skills development facilitator (15 percent rebate);
- The employer must prepare a work place skills plan (10 percent rebate);
- The employer must implement this plan and report on progress (20 percent rebate);
- The plan must be used to develop specific skill shortages (five percent);

- The training service has to be approved by the relevant Sectorial Education and Training Authority.

4.7 CURRENT DEVELOPMENT ISSUES AND CHALLENGES FACING THE HUMAN RESOURCE FUNCTION.

Carrell, Elbert and Hatfield (1995:9) advise that in a fast-paced global economy, environmental, social and technological change is the norm. Strategic human resource management has the combined role of increased organisation effectiveness, while ensuring that the workforce is a satisfied. This is a difficult task and, as Carrell et al (1995:23) reminds us, it is difficult enough to attract, retain, motivate, and develop individuals without the challenges of a turbulent environment. Carrell et al (1995:23) list current human resource issues and challenges as being the following:

- **Worker productivity:** To compete in the fiercely competitive global markets, stringent standards such as ISO 9000 are being demanded of companies, and to achieve these standards calls for excellent systems and productive people to maintain them. Workers are being handled differently with more autonomy and responsibility being given, being rewarded differently, and teams replacing supervisors with a great deal of emphasis being placed on multiskilling and flexibility;

- **Quality Improvement:** A new philosophy exists where excellence is regarded as the norm and improved quality means survival. Carrell et al (1995:27) state that critical success factors in quality improvement include education and training, teamwork and employee involvement;
- **Downsizing, Delayering, and Decruiting:** As global competition and high wages take their toll on the competitive position of the company, different strategies have to be implemented for the company to remain competitive. These strategies often include reducing the numbers of employees, which leads to a sense of insecurity in the remaining staff. The challenge to the human resource department is boosting the morale of the workforce and to successfully convince them that the actions were for the good of the company in the long run;
- **The changing workforce:** Carrell, et al (1995:28) claim that there are more single parents, working couples, women and minorities in the composition of a current workforce. Because of retrenchments and downsizing strategies previously mentioned, it is noticeable that staff are also less loyal;
- **Global economy:** Increased competition worldwide has brought new challenges such as joint ventures and alliances, some with foreign countries where cultures need to be understood;
- **The impact of government:** In South Africa, it has become necessary to introduce legislation which seeks to address societal imbalances, created by policies of the previous government. This legislation forces companies to abide with employing previously disadvantaged people including, blacks, women and disabled people;

- **Technology:** Technology has dramatically increased the skills and training necessary to perform many of the jobs in today's organisations.

4.8 METHODS OF DEVELOPING WORLD CLASS SKILLS

The theory discussed on clusters in Chapter three clearly confirms that human capital has to be developed in order to meet the criteria essential for the organisation in order to attain competitive advantage in the cluster. This section discusses examples of developing these necessary skills.

4.8.1 THE PROCESS OF LIFE LONG LEARNING: A GLOBAL PERSPECTIVE

Although Johnson and Scholes (1999:107) state that globalisation results in worldwide competing for a share of the world's business, to some businesses, it is not so obvious that it also results in the global competing for jobs. This suggests that to compete globally, companies need global business skills, a global mindset as well as conducting their career planning with an emphasis on international development.

The dynamics of today's competitive environment and the rapid pace of technological advancements, caused by innovative companies striving to be consistently competitive in world markets, has ensured that workers will not enjoy the same job description for the rest of their lives. Lau (1996:14) endorses this fact by stating that many manufacturers are so focused on the mechanics of programmes, which will enable them to gain the competitive advantage, that they neglect the development of skills and capabilities needed to support the changes. Job descriptions and worker development have to be continuously updated to support the company in its quest to be competitive.

While there is worldwide unemployment, the fact remains that there is still a worldwide shortage of skilled workers. McMorrow (1999:8) believes that because there are not enough high-quality workers to meet the needs of global business, more emphasis must be placed on continuous learning and the retraining of existing workers. Lau (1999:8) quotes Gary Lewis, project manager at Du Pont, as saying that " … the issue is not only how to hire people with fundamentally different skill sets, but how to retrain the existing workforce." Training the workforce offers opportunity for the providers of education who must realise that they have to become portable and offer classes on the premises of companies. This option however may not suit companies and they could demand of their workforce that they update their skills in their own time or face the prospect of becoming redundant. An address by the Institute of Electrical Engineers President, David

Jefferies (1998:4), puts this statement into perspective in his field when he states that, " … the range and demand of engineering knowledge is expanding so rapidly that a good engineering degree has a half-life of only four years, thus, keeping abreast of new technology is vital.

The education system currently takes on many forms. There are still the traditional tertiary institutions, but they realise that the needs of the end user are ever-changing. Technology too, has enabled many qualifications to be completed online via the internet while video conferencing is another technological advancement in the education field. McMorrow (1999:9) states that whatever the form of education delivery, continuous learning is key to a successful career. McMorrow (1999:9), adds that as corporations compete for high quality people, education will emerge as both a necessity and an employee benefit.

4.8.2 DEVELOPING A POOL OF SKILLED WORKERS TO SUIT A MANUFACTURING AREA.

The problem of insufficient skills has been addressed before in the body of this chapter, but it is deemed necessary to look at a further alternative which could alleviate this problem. Dzikowski (1998:6) informs that the Housatonic Education for Advanced Technology (HEAT) have formed a training initiative which seeks to develop the technical skills of current workers and prepare a pool of skilled workers to support future growth and expansion.

What makes this initiative remarkable is the fact that it includes 18 area high tech manufacturers and over 12 Danbury area organisations in business, education and government. Dzikowski (1998: 6) states that members include the Housatonic Valley Economic Development Partnership, the Greater Danbury Chamber of Commerce, as well as the Connecticut Department of Labour.

HEAT have not approached the training initiative in direct competition to local education providers, but rather in conjunction with them. The difference is that HEAT analyse the needs of industry in the area, and then adjust the curriculum to suit the need, to ensure that workers are only subjected to material that has relevance to their working environment.

4.8.3 MENTORING

Mentoring is a process of transmitting knowledge, skills and abilities to perform certain tasks, and can be conducted informally or formally. Ivancevich and Matteson (1999:85) state that in work organisations, a mentor can provide coaching, friendship, sponsorship, and role modeling. Mentoring is an option of on the job training, where skills and knowledge are transferred to a designated person while performing the task. Multinational companies pass on world class skills by using foreign managers in developed countries to undergo mentorship programmes in less developed countries which fast tracks the passing on of world class skills.

Ivancevich and Matteson (1996: 97) state that the increasing diversity in the workforce adds a new dimension to the mentor-mentee matching process. People are generally attracted to mentors who talk, look, act and communicate in a manner similar to them. Gender, race, and ethnicity all play a role in matching. If mentor-mentee matching is left to occur naturally, women, blacks, Hispanics and Asians may be left out. The under representation of these groups at management level needs to be evaluated in each firm that considers using mentor-mentee matching.

An organisation must ensure that if an affirmative action manager is to be placed on merit, he or she needs to be formally introduced into the organisation, and that his or her role be clearly defined to avoid conflict and confusion and to speed up his or her development, if need be. The relationship with a mentor is of critical importance in doing this.

Domeyer (1999:21) believes that the advantage of mentoring as an option of obtaining skills is advantageous for the following reasons:

- Mentoring facilitates growth by honing technical and interpersonal skills, and developing leadership abilities, which results over time in a pool of qualified employees for management roles;

- Mentoring boosts consistency and excellence. Mentors promote the company's best practices and corporate culture enabling mentees to be fast-tracked in becoming productive;
- Mentoring promotes information sharing. With today's rapid technological advances, some companies use various forms of peer mentoring. Through peer mentoring, two employees with equal experience in different areas share effective strategies for increasing productivity and managing staff.

4.9 CONCLUSION

According to Marquardt (1996:15) there are a growing number of organisational people who that are becoming aware that the knowledge, the strategies, the leadership and the technology of the past will not lead to the achievement of success in the future business world. Companies, in order to succeed, need to increase their **corporate capacity to learn** if they are to function in an environment of continuous change, including mergers, rapid technology change, socio-technical change and increasing competition. Marquardt (1996:16) continues that continuous transformation in organisations through an increase in adaptive and productive capabilities needs to be instituted by learning from the changing environment.

While there are many views on how a company wishing to compete globally should invest in human capital, all the proponents of these views remain unanimous that the investment in people should indeed take place. One of the most striking

comments in this chapter was that of Lau (1996:14) who claimed that it was essential that continous training and skills development should accompany the changes needed to remain at the forefront of competition.

The South African Government has encouraged investment in human capital by introducing legislation which, on the one hand, forces the company to pay for the development, and on the other hand, provides an incentive to claim half of the amount back. The Employment Equity Act will no doubt impact on the speed with which South African companies achieve world class manufacturing status. Mentoring affirmative action managers can, however, shorten the time that it takes for them to become productive. Morally, however, the act will have hopefully achieved it's objective of ridding the South African society of the imbalances created by past governments. It is important that this legislation does not send the wrong signals to foreign investors who have the entire world to choose from in securing a location for their investment.

This chapter has addressed the sub problem of " how knowledgeable people feel that companies should build up world class skills."

CHAPTER FIVE

THE EMPIRICAL STUDY, METHODS USED AND ANALYSIS OF DATA

5.1 INTRODUCTION

Chapters two and three of the literature study analysed clusters and the infrastructure present in the Border-Kei Cluster. The information gained from these chapters help answer the first sub-problem: How do clusters enhance the development of competitive advantage in an area? Chapter four discussed the relevant South African legislation affecting the composition of the workforce in organisations, and answered sub-problem two: What is revealed in the literature study as ways to develop world class skills and knowledge in the workforce?

Information gathered from the empirical study will ascertain what methods are currently being implemented to build world class skills. This data, together with the information of the literature study, will help formulate a strategy for the cluster to build world class skills. The method and design of the empirical study will be addressed in this chapter.

5.2 THE EMPIRICAL STUDY

Data obtained from the empirical study will help resolve sub-problem three and four, namely:

- What do knowledgeable people feel are ways in which to develop a work class workforce in the Border-Kei Motor Industry Cluster?
- What strategy can the Border-Kei Motor Industry Cluster adopt to develop world class skills and knowledge in the workforce?

The empirical study used a questionnaire developed from the theory in chapters two, three and four. The process of the empirical study was as follows.

5.2.1 THE QUESTIONNAIRE

The questionnaire was developed from the theory derived from the literature study, as well as ensuring that the responses answer the sub-problems, and subsequently help formulate a strategy to answer the main problem. (See Annexure 5.1) Leedy (1997:191) states that a commonplace instrument for observing data beyond the physical reach of the observer is the questionnaire. He also states that the questionnaire is a tool which is needed to probe the minds or the attitudes, feelings, or reactions of men and women.

The questionnaire was divided into two parts:

Section A was made up of questions of a biographical nature such as number of employees, geographical location, gender,race and position of the respondent.
Section B required respondents to choose from a five point scale to indicate the degree to which their organisation agreed with the particular question.

Postal surveys were used due to the fact that Welman and Kruger (1999:153) cite the advantages of utilising postal surveys as being associated low costs, the respondent anonymity, and the fact that the respondent may complete the survey at their leisure.

5.2.2 ADMINISTERING THE QUESTIONNAIRE

The author decided, with the utmost respect, not to elicit the support of DCSA in firstly compiling the questionnaire, and, secondly, in deciding who it should be sent to. The reason for this is that it was important to unearth the facts as they stood for the whole of the cluster, and not only to some suppliers who have mastered their supply chain with DCSA.

It was decided that the chosen suppliers must also be manufacturers, to give a more accurate and relevant response to the survey. Supplier information was obtained from lists supplied by the Border Chamber of Business, DCSA publications such as the Global Supplier and the DCSA star, which feature prominently in the literature study, and also from Co-ordinated Material Handling, who act as a receiving agent for DCSA. 28 surveys were posted.

The questionnaire was posted on the 1st December 2000 and requested the response to be in by the 15 December 2000. Although the survey was intended to be anonymous, the author ensured that at least eight of the most prominent companies participated by personally retrieving their completed questionnaires.

5.2.3 THE RESEARCH RESPONSE

Of the 28 surveys originally posted, 17 were used for the purpose of the empirical study. This represents a 60 percent response rate which is acceptable according to Emory and Cooper(1991:333) who state that thirty percent is an acceptable response rate for postal surveys.

5.3 RESULTS OF SECTION A OF THE QUESTIONNAIRE

The results for Section A are indicated by the following tables and are self explanatory.

Table 5.1: Quantity of employees in the organisation

Size	**Response frequency**	**Percentage**
0 to 100 employees	6	35.30
100 to 500 employees	9	52.94
501 to 1000 employees	2	11.76
1001 to 2000 employees	0	0
2001 to 3000 employees	0	0
TOTAL	17	100.00

Source: Results obtained from the analysis of organisation size

Table 5.1 shows that 52.94 percent of respondents fell into the group of 501 to 1000 employees with 35.30 percent in the 0 to 100 employee group. There was 11 percent of the respondents in the 501 to 1000 employee group with no respondents over the 1000 employee mark.

Table 5.2: Respondents by magisterial district

Magisterial district	**Response frequency**	**Percentage**
East London	13	76.47
King William's Town/ Berlin	4	23.53
TOTAL	17	100.00

Source: Results of analysis of response rate by magisterial district

Table 5.2 indicates the response from the East London district (76.47 percent) and the area encompassing King William's Town and Berlin (23.53 percent)

Table 5.3: Position of the respondent

Position of respondent	**Response frequency**	**Percentage**
Human Resources/ Personnel Manager	6	35.30
Training Manager	2	11.76
Plant Manager	8	47.06
Financial Manager/ Administration Manager	0	0
Other	1	5.88
TOTAL	17	100.00

Source: Results obtained from analysis of position of respondent

It is important to state that although it was the intention that the Human Resources, Personnel or Training Manager complete the questionnaire, many of the smaller organisations operate without these positions and as a result the Plant Manager completed the questionnaire. The Plant Managers accounted for 47.06 percent of the responses, the Human Resources/Personnel Managers accounted for 35.30 percent, Training Managers returned 11.06 percent, with other accounted for 5.88 percent.

Table 5.4: Respondents by race

Race	**Response frequency**	**Percentage**
Asian	0	0
Black	0	0
Coloured	3	17.65
White	14	82.35
TOTAL	17	100.00

Source: Results obtained from analysis of response rate by race

Table 5.4 indicates that only White Managers (82.35 percent) and Coloured Managers (17.65 percent) responded.

5.4 RESULTS OF SECTION B OF THE QUESTIONNAIRE

Section B required the respondent to answer questions relating to:

1. How current legislation affects their organisation;
2. The Border-Kei Industry Cluster;
3. Their organisation's method of training;
4. Whether their organisation undergoes mentoring.

It was decided to reduce the options from a five point scale to a three point scale. This was done in order to make the results more meaningful due to a small sample. As a result the responses are now Agree, Uncertain and Disagree.

The results of Section B of the questionnaire follow in the above sequence.

5.4.1 LEGISLATION – RESULTS AND INTERPRETATIONS

Table 5.5 below indicates the response to the legislation questions posed.

Table 5.5: Response to legislation questions

	Agree	Uncertain	Disagree
1.1 Our organisation has an Employment Equity Plan in place	14 82.35%	0 0.00%	3 17.65%
1.2 Our organisation believes that Employment Equity legislation will lead our organisation to become globally uncompetitive	6 35.29%	2 11.76%	9 52.94%
1.3 Our organisation believes that the Skills Development Act will lead to more effective training in our organisation.	10 58.82%	0 0.00%	7 41.18%
1.4 Our organisation feels that the Skills Development Levy is an incentive to train	8 47.06%	1 5.88%	8 47.06%
1.5 Our organisation could do more training	12 70.59%	0 0.00%	5 29.41%

Source: Response to Question B1

The following are the results and interpretations of Table 5.5.

In Question 1.1, 82.35 percent of respondents confirm that an Employment Equity Plan is in place, while 17.65% do not have one in place. It must be concluded that the majority of the respondents who do not have a plan in place are those

organisations who have less than 50 employees and therefore do not need to submit an Employment Equity Plan.

In Question 1.2, 52.94 percent of respondents disagree that the Employment Equity legislation will lead to their organisation being globally uncompetitive, while 35.29 percent do not think so. 11.76 percent of respondents are undecided. This result indicates that the majority of organisations are confident of achieving their equity plan objectives by employing or developing quality people in the correct ratio and organisational level as defined by the Employment Equity Act.

Question 1.3 confirms that the Skills Development Legislation will lead to more training as the majority of respondents (58.82 percent) indicated so. 41.18 percent of the respondents did not believe so, which could indicate that they already spend in excess of the percentage of payroll which the Act currently requires an organisation to submit. The question and results of Question 1.4 are similar and therefore do not require comment.

In Question 1.5, 70.59 percent of respondents feel that their organisation could do more training while 29.41 percent do not believe so. This trend is line with companies competing globally who believe in a process of continuos learning to maintain a competitive advantage.

5.4.2 THE BORDER-KEI MOTOR INDUSTRY CLUSTER – RESULTS AND INTERPRETATIONS

The objective of this part of the questionnaire is to ascertain whether the respondents feel that there is competitive advantage to be attained by being part of a cluster, in close proximity to the industry driver. Table 5.6 below indicates the responses received.

Table 5.6: Response to cluster questions

	Agree	Uncertain	Disagree
2.1 Our organisation is a member of the Border -Kei cluster	15 88.24%	1 5.88%	1 5.88%
2.2 Our organisation believes that being part of the Border-Kei cluster enhances our competitive advantage	14 82.35%	1 5.88%	2 11.76%
2.3 Our organisation believes that being part of the Border-Kei cluster results in shared resources	16 94.12%	0 0.00%	1 5.88%
2.4 Our organisation believes that being part of the Border-Kei cluster results in interaction which leads to continuous learning	10 58.82%	3 17.65%	4 23.53%
2.6 Our organisation makes use of facilities at DaimlerChrysler for training	8 47.06%	0 0.00%	9 52.94%
2.7 DaimlerChrysler continually offers training and support which enhances our organisation	8 47.06%	0 0.00%	8 52.94%

Source: Response to Question B2.

The following are the results and interpretations of table 5.6.

Question 2.1 confirms that the majority of respondents (88.24 percent) feel that they are members of the cluster

In Question 2.2, 82.35 percent of the respondents believed that their competitive advantage is enhanced by being part of the cluster. 11.76 percent do not agree, while 5.88 percent (one organisation in this instance) is unsure. It must be assumed that the advantage of proximity then to either the industry driver or other suppliers leads the majority of respondents to feel this way.

As in Question 2.2, Question 2.3 also received the majority of responses (94.12 percent) agreeing that, being part of the cluster results in shared resources.
One organisation disagreed. This confirms that benefit is derived from the cluster infrastructure by members in the cluster.

Question 2.4 indicates that the majority of respondents (58.82 percent) believe that as a cluster organisation, interaction follows with cluster members, which leads to continuous learning. However, 41.18 percent disagreed or were uncertain. This could be interpreted along with the previous questions in this section that, there is advantage in proximity and the infrastructure that develops as a result of the cluster, but more interaction between organisations within the cluster could lead to an increase in the transfer of knowledge.

Questions 2.5 and 2.6 confirm that approximately half (47.06 percent) of the respondents agree that they utilise DCSA facilities for training, and that DCSA offers training and support. In both questions, 52.94 percent of respondents indicate that DCSA does not offer training and support and that they do not use the DCSA facilities for training. This could be interpreted that DCSA either does not supply training for certain skills or that some organisations prefer to undertake their own training.

5.4.3 METHODS OF TRAINING – RESULTS AND INTERPRETATIONS

The Border- Kei Cluster consists of many multinational companies. In this section, the objective was to ascertain how organisations are building and maintaining world class skills, compared to other organisations competing globally. Table 5.7 indicates the responses received.

The following are the results and interpretations of Table 5.7.

In Question 3.1 all respondents agreed that to be globally competitive, training and development is critical.

Questions 3.2 and 3.3 uncovered that 64.71 percent of the respondents were part of multinational organisations, but that only 41.18 percent of these organisations used foreign staff to pass on skills. On face value this seems to be a missed

opportunity as many of these multinational organisations have companies in first world countries, who are exposed to first world training techniques.

Table 5.7: Response to methods of training

	Agree	Uncertain	Disagree
3.1 Our organisation believes that to become globally competitive, training and development is critical	17 100%	0 0.00%	0 0.00%
3.2 Our organisation is a multinational organisation	11 64.71%	0 0.00%	6 35.29%
3.3 Our organisation makes use of foreign staff members to pass on skills learnt to employees	7 41.18%	1 5.88%	9 52.94%
3.4 Our organisation purely makes use of in house training to pass on skills and knowledge to employees	7 41.18%	0 0.00%	10 58.82%
3.5 This in house training takes the form of formal in house courses, on the job training, or a combination of both	14 82.35%	1 5.88%	2 11.76%
3.6 Our organisation makes use of education providers such as universities and technikons to provide training	7 41.18%	0 0.00%	10 58.82%
3.7 Programmes and courses offered by the above institutions are formulated in conjunction with the organisations in our industry	4 23.53%	0 0.00%	13 76.47%

Source: Response to Question B3

In Question 3.4, 41.18 percent of respondents indicated that they purely used in house training to build world class skills. This indicates that the majority of

respondents (58.82 percent) use a combination of in house training and training through other alternatives.

82.35 percent, confirmed in Question 3.5, that this in house training consisted of either on the job training, formal courses, or a combination of both.

Only 41.18 percent of respondents confirmed to using education providers, in Questions 3.6 and 3.7. Of those organisations that uses these education providers, only 23.53 percent had input into the curriculum of the courses presented. Because of the low percentage of respondents then that used education providers, for courses unrelated to their inherent processes, it can be deduced that they must use these institutions to develop skills which are not directly linked to their process, like management skills.

5.4.4 MENTORING – RESULTS AND INTERPRETATIONS

The theory in the literature study pointed out the benefits of mentoring in the transfer of knowledge, education and skills. The main reason for mentoring in the questionnaire is to ascertain whether or not it is being used by South African organisations to fast track affirmative action employees, as it seems the ideal tool to do so. Table 5.8 indicates the response to the mentoring questions posed.

Table 5.8: Response to mentoring questions.

	Agree	Uncertain	Disagree
4.1 Our organisation believes that a mentoring programme is essential to affirmative action	11 64.71%	1 5.88%	5 29.41%
4.2 Our organisation makes use of a structured mentoring programme to pass on knowledge and skills to their proteges.	3 17.65%	0 0.00%	14 82.35%
4.3 Our organisation makes use of an informal mentoring programme to pass on knowledge and skills to their proteges	12 70.59%	0 0.00%	5 29.41%

Source: Response to Question B4

The following are the results and interpretations of Table 5.8.

In Question 4.1, the majority of respondents (64.71 percent) confirmed that a mentoring programme is essential for affirmative action employees in an effort to fast track the process of equipping them with the necessary skills and knowledge. There were, however, 29.41 percent that disagreed with the mentoring option. It may be that of the respondents who disagreed, that felt that the employee would not be comfortable with the special attention, and would rather develop as part of the normal system.

In questions 4.2 and 4.3, it is discovered that of the respondents that undergo mentoring programmes, 17.65 percent of those programmes were formally structured, while 70.59 percent were informal programmes. These figures lead to a deduction that organisations realise the importance of mentoring, but possible have not yet established a formal method of introducing mentoring, as it is not a priority in terms of training at this point.

5.5 CONCLUSION

The objective of this chapter was to advise how the empirical study was planned and designed in an effort for respondents to supply information that would assist the author in answering the two sub problems and to compile a strategy to answer the main problem. A questionnaire was developed based on the theory in the literature study and sent to the research population defined. According to a knowledgeable source quoted, a satisfactory response was obtained, of which a reference is provided.

Results and interpretations for each question were tabled and it can be stated that the information provided to a large degree supports that of the literature study, although there are a few disparities, which is to be expected. As a result, the empirical study, with the literature study will form the basis of the following chapter, which integrates the two studies and suggests a strategy for the Border-Kei Motor Industry Cluster to develop a workforce in possession of world class skills.

CHAPTER SIX

AN INTEGRATION OF THE FINDINGS OF THE EMPIRICAL SURVEY WITH THE THEORETICAL SURVEY DEVELOPED FOR THE STUDY, RECOMMENDATIONS AND CONCLUSIONS

6.1 INTRODUCTION

The aim of this chapter is to integrate the findings of the literature study with that of the empirical survey to uncover similarities and differences between the two, in an effort to resolve the fourth sub-problem which is:

What strategy can the Border-Kei Motor Industry Cluster adopt to develop world-class skills and knowledge in the workforce?

The above sub-problem will be answered in the content section of this chapter under the sub-heading: The development of a human resource development strategy for the Border-Kei Motor Industry Cluster. This title is also the main problem of this research paper.

The empirical study, in the form of a questionnaire, was broken down into four factors, which utimately make up the main problem. These factors are:

- Legislation;
- The Border-Kei Motor Industry Cluster;
- Methods of training;
- Mentoring.

It is under these sub-headings that the strategy will be formulated in the format of comparing the literature study with the empirical survey. A conclusion will close the chapter with comments on the overall position of the Border-Kei Cluster compared to the theoretical models as descibed in the literature study.

6.2 THE DEVELOPMENT OF A HUMAN RESOURCE DEVELOPMENT STRATEGY FOR THE BORDER-KEI MOTOR INDUSTRY CLUSTER

6.2.1 STRATEGY – LEGISLATION

DCSA have done a lot of policing for the government in terms of the Employment Equity Act in that, where possible, they only conduct business with organisations that have an Employment Equity Plan in place. This places the necessary pressure on organisations wishing to supply DCSA, to compile an Employment Equity Plan, irrespective of whether the organisation has over the required fifty employees, or not. This is the reason for the empirical survey indicating that over 80 percent of the respondents have an Employment Equity Plan in place. This is illustrated in Table 5.5.

However, DCSA, cannot enforce the Skills Development legislation, which is levied at a half a percent of organisations' payrolls. 58.82 percent of the respondents to the survey admitted that the Skills Development legislation would lead to an increase in training. This could mean that the 82.35 percent of respondents in Table 5.7 who claim that their organisation subscribes to in house training, do not consider this training an outlay in monetary terms. An encouraging statistic in was the 70.59 percent of respondents who admitted that their organisation could do more training.

Employment Equity and Skills Development legislation provide the cornerstone to the government's policy of correcting the social imbalances of the past, and as a result are here to stay. Organisations have to look at this legislation in the light of what benefit it has to offer the organisation and society as a whole, not in terms of a punitive law imposed by the government.

6.2.2 STRATEGY – THE BORDER-KEI MOTOR INDUSTRY CLUSTER

Although Mercedes-Benz have been building vehicles in East London for 42 years, the development of the cluster has only been accelerated with DCSA being awarded the contract to supply right hand drive W203 vehicles to the rest of the world. The first unit of the W203 rolled off the line on schedule on 1 August 2000.

As the literature study confirmed, DCSA had invested R 1,3 billion and suppliers a further R 1 billion.

An essential part of this study was to research clusters and to ascertain as to whether there is competitive advantage to be gained by being situated in close proximity to the industry driver and industry suppliers. Respondents confirmed in Table 5.6 of the empirical study that their organisations believed that being part of the cluster;

- Enhanced their competitive advantage (82.35 percent);
- Resulted in shared resources (94.12 percent);
- Resulted in interaction which lead to continuous learning (58.82 percent).

The theory of the literature study therefore concurs with that of the empirical study.

6.2.3 STRATEGY – METHODS OF TRAINING

The literature study quoted McMorrow, who stated that in order to meet the needs of global business, more emphasis must be placed on continuous learning and the retraining of existing workers. The empirical study reinforces this fact, and is indicated in Table 5.7, where every respondent agreed that training and development is critical in becoming globally competitive.

Table 5.7 of the empirical study indicated that 41.18 percent of respondents purely use in-house training in the form of on-the-job-training and formal courses. This statistic could be adequate for those organisations who have specialised processes and are forced to follow this route. This statistic, however, does not augur well for management development, which apart from mentoring, cannot be executed in house. Interestingly, only 41.18 percent of respondents make use of the education providers, such as Rhodes University and the technikons in the area. This percentage could increase with the introduction in 2001 of the Rhodes University MBA, which is launched with Investec as the Rhodes / Investec Business School. A series of short course programmes for practising managers in organisations will also be offered.(Hilite 2000:14)

Education providers in the cluster tend to rely on DCSA for business alone and not other organisations in the region, and it is hoped that DCSA will be the conduit to acquiring supplier business. This is supported by the fact that only 41.18 percent of respondents utilise formal education providers.

A starting point for organisations, wishing to build a workforce with world-class skills, is to look to the DCSA database of screened workers. As the literature survey states, this pool is 44 000 strong, consisting of workers with a variety of skills. It is up to the supplier to access this database to attempt to match their request with the available skills. Savings are time, and duplication of effort, as well as minimising the chance in employing unsuitable personnel.

According to the literature study, a similar strategy occurred in Houston Texas, where 17 manufacturers created a skilled pool of labour. They went one further and involved the local education institutions. DCSA are registered technical trainers, so suppliers can effect their training there and claim back relevant funds. In table 5.6, the empirical study indicates that 47.06 percent of respondents make use of training facilities at DCSA, and another 47.06 percent indicates that DCSA continually offers training and support.

The empirical study has confirmed the interaction between members of the cluster as is advocated in the literature study. The only discerning factor is that DCSA, as the industry driver, seems also to be the proactive member in organising this interaction. In fairness, though, to the cluster in general, and going back to the opening statement of this section, the cluster has only recently begun operating as such, and it will take some years to utilise the interaction to the good of all.

6.2.4 STRATEGY – MENTORING

The relevance of mentoring as a separate factor in this strategy, is that the literature study informed that is an ideal tool to equip an affirmative action candidate with knowledge, ability and skills at a faster than normal rate. It was thus encouraging to note in Table 5.8 that 64.71 percent of respondents agreed that mentoring is ideal for this purpose. As mentioned in Chapter 5, there were 29.41 percent of

respondents who did not agree with using mentoring to advance affirmative action employees possibly because the employees would be uncomfortable with the special treatment. The literature study refers to the correct method of handling affirmative action trainees, as, he or she needs to be formally introduced into the organisation, and that his or her role be clearly defined, to avoid conflict and confusion. It is here that the mentor needs to play a major role.

The literature survey advised that multinational companies in first world countries, use foreign managers to pass on skills in companies in less developed countries, in the form of formal and informal mentorship programmes. In Table 5.8 of the empirical survey, 41.18 percent of respondents confirmed that they use foreign managers to pass on skiils to employees. The empirical study therefore concurs with the literature study.

6.3 CONCLUSION

The infrastructure of the Border-Kei Motor Industry Cluster is fairly well developed considering that DCSA has only recently become a global player. With this introduction into global markets, the South African Government and local authorities have seen the economic benefits of providing facilities such as the harbour, that may be utilised by other motor manufacturers, as well as DCSA related industries. This confidence has resulted in organisations such as the Border Chamber of

Business, CIMEC, SADTI and Portnet, to getting involved and developing the automotive cluster together with DCSA, and the related suppliers.

It is to the credit of the leading suppliers that many have attained international quality certifications, such as ISO9000 and VDA6. It has to be stressed that an intergral part of achieving these standards are based on employee skills and development levels, as is stated in the literature study.

The empirical study has indicated that cluster members seem comfortable with the legislation that they are forced to adhere to. In Table 5.5, 52.94 percent of the respondents felt that the Employment Equity legislation would disadvantage them. The fact is that these suppliers have mechanisms in place to deal with the requirements of an Employment Equity Plan, that could include mentoring programmes.

In order to supply world-class vehicles to global markets requires world class skills. Members within the cluster have achieved world class standards by employing a variety of methods to train and develop their work forces.. These organisation have used a combination of in-house options of on-the-job training and formal courses, as well as provided by DCSA and external education institutions. As the cluster develops, however, it is essential that suppliers to DCSA play an equal role to that of DCSA in the training and development of human capital ensuring a steady stream of skills to the industry.

REFERENCES

Anderson, G. 1994. Industry clustering for economic development. *In Economic Development Review*, Vol.12, (2), 26 - 33.

Carrell, M.R., Elbert, N.F. and Hatfield, R. D. 1995. Human resource management: Global strategies for managing a diverse workforce. (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.

DCSA Star. July 2000. River Publications. Unpublished document.

DCSA Star. August 2000. River Publications. Unpublished document.

Domeyer, D. Mentoring in business. *Women in Business*, Vol. 51 (6), 20.

Douwes Dekker, L. 1998. *The search for competitiveness in South Africa: the IR-Driven employment relationship*. Randburg: Resource Knowledge.

Dzikowski, D. 1998. Manufacturers turn up HEAT to develop worker skills. *Fairfield County Business Journal,* Vol. 37 (34),6-7.

East London Focus 2000/2001. New century business opportunities in South Africa's Border-Kei region. Musgrave: Norma Behl and associates.

Global Supplier News Journal. 2000. Issue no 1.

Global Supplier News Journal. 2000. Issue no 2.

Global Supplier News Journal. 2000. Issue no 3.

Government Gazette 1998. The Employment Equity Act.

Hellriegal, D., Jackson, S.E., and Slocum, J.W. 1999. *Management.* (8th ed). Cincinnati: South-Western College.

Herholdt, W. and Marx, M. 1999. *Employment Equity in South Africa. A Guide to Affirmative Action Success.* South Africa. Prentice Hall.

Horwitz, F. M. 1996. Human Resource Development and Managing Diversity in South Africa. *International Journal of Manpower,* Vol. 17, 134 – 151.

Hilite. July 1999. Business to business magazine of Border-Kei Region. Countdown Communications.

Hilite. August 1999. Business to business magazine of Border-Kei Region. Countdown Communications.

HSRC Study. August 1999. Skills shortages in the South African labour market. Pretoria: Corporate Communications.

Irwin, D. Industry clusters key for Arizona*. Inside Tucson Business*, Vol. 9 (43), 1-2.

Jefferies, J. 1998. Life long learning isn't optional, it's essential. *Design Engineering.*

Johnson, G. and Scholes, K. 1999. *Exploring corporate strategy.* (5th ed.). London: Prentice-Hall.

Lau, R. S. M. 1996. Strategic flexibility: A new reality for world-class manufacturing. *S.A.M. Advanced management journal*, Vol. 61 (2),11-15.

Leedy, P.D. 1997. Practical Research. (6th ed.). Upper Saddle River: Merril.

Le Veen, Jessica.Urban and Regional Development. March1998

Mbigi, L. and Maree, J. 1995. *The spirit of African Transformation Management.* Pretoria: Sigma Press.

McMorrow, J. 1999. Future trends in human resources. *HR focus,* Vol. 76 (9), 7-10.

National Association of Automotive Component and Allied Manufacturers. http:www.naacam.co.za.

National Skills Authority. *Skills for productive citizenship for all*. October 2000.

Noble, J. 2000. A skilful response to the Skills Development Act. *Management Today,* Vol. 16 (3), 6-48.

People Inc. 1999. Sustainable Employment Equity. Unpublished.

Pons, A. and Deale, P. 1998. *Labour relations handbook.* South Africa: Juta and Co.

Porter, M.E. 1990. *The competitive advantage of nations*. Houndmills: Macmillan.

Porter, M.E. 1998. Clusters and the new economics of competition. *In Harvard Business Review,* Vol. 76 (6), 77-91.

Porter, M.E. 2000. Location, Competition, and Economic Development: Local Clusters in a Global Economy. *Economic Development Quarterly,* Vol 14. (1), 15 – 35.

Skills Development Act (Act 97 of 1998).

http: www.labour.gov.za/docs/legislation/skills/index.html.

Skills Development Levies Act (Act No. 9 of 1999).

http: www.labour.gov.za/docs/legislation/skills/index.html.

Timmons, J.A.1999. *New Venture Creation – Entrepreneurship for the 21st century.* (5th ed.). McGraw-Hill: Singapore.

Waits, M.J. 2000. The added value of the industry cluster approach to economic analysis, strategy development, and service delivery. *Economic Development Quarterly,* Vol.14(1), 35-51

Welman, J. C. and Kruger, S.J. 1999. *Research Methodology for the Business and Administrative Sciences*. Cape Town: Oxford Press.

ANNEXURE 5.1

QUESTIONNAIRE ON METHODS OF HOW TO

BUILD UP WORLD CLASS SKILLS

SECTION A: DEMOGRAPHIC DATA

This section of the questionnaire is purely for statistical purposes.

INSTRUCTIONS

Please place a cross (X) in the appropriate box

1. How many employees does your organisation have in total?

- ☐ 0 to 100
- ☐ 100 to 500
- ☐ 501 to 1000
- ☐ 1001 to 2000
- ☐ 2001 to 3000
- ☐ 3001 to 4000
- ☐ 4001 to 5000
- ☐ greater than 5000

2. In which magisterial district do you operate?

- ☐ East London
- ☐ King Williams Town\Berlin

3. What is the nature of the post that you hold?

☐ Human Resources/ Personnel Manager

☐ Training Manager

☐ Plant Manager

☐ Financial/ Administration Manager

☐ Other

4. Your race?

☐ Asian ☐ Black

☐ Coloured ☐ White

SECTION B: INTRODUCTION

This study is based on the premise that world class skills are essential for organisations to compete globally. The objective of this study is to ascertain how suppliers to the Border-Kei Motor Industry Cluster obtain these skills against South African legislation.

INSTRUCTIONS FOR COMPLETING SECTION B OF THE QUESTIONNAIRE

Please complete the questionnaire using the following scale:

1 = STRONGLY AGREE

2 = AGREE

3 = UNCERTAIN

4 = DISAGREE

5 = STRONGLY DISAGREE

1. LEGISLATION

The Employment Equity Act, Skills Development Act, and Skills Development Levies Act all impact on decision making in training and developing employees.

Please indicate the degree to which you agree/disagree with the following statements.

	Strongly Agree	Agree	Uncertain	agree	Strongly Disagree
1.1 Our organisation has an Employment Equity plan in place.	1	2	3	4	5
1.2 Our organisation believes that Employment Equity legislation will lead our organisation to become globally uncompetitive.	1	2	3	4	5
1.3 Our organisation believes that the Skills Development Act will lead to more effective training in our organisation.	1	2	3	4	5
1.4 Our organisation feels that the Skills Development Levy is an incentive to train.	1	2	3	4	5
1.5 Our organisation could do more training.	1	2	3	4	5

2. THE BORDER – KEI MOTOR INDUSTRY CLUSTER

The Border – Kei Motor Industry Cluster consists of DaimlerChrysler South Africa and the industries that support it in East London and surrounding areas.

Please indicate the degree to which you agree/disagree with the following statements.

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
2.1 Our organisation is a member of the Border-Kei cluster.	1	2	3	4	5
2.2 Our organisation believes that being part of the Border-Kei cluster enhances our competitive advantage.	1	2	3	4	5
2.3 Our organisation believes that being part of the Border-Kei cluster results in shared resources.	1	2	3	4	5
2.4 Our organisation believes that being part of the Border-Kei cluster results in interaction which leads to continuous learning.	1	2	3	4	5
2.5 Our organisation makes use of facilities at DaimlerChrysler for training.	1	2	3	4	5
2.6 DaimlerChrysler continually offers training and support which enhances our organisation.	1	2	3	4	5

3. METHODS OF TRAINING

An essential part of this study is to ascertain how organisations within the cluster are building world class skills and opinions on whether educational institutions can play a further role in this regard.

Please indicate the degree to which you agree/disagree with the following statements.

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
3.1 Our organisation believes that to become globally competitive, training and development is critical.	1	2	3	4	5
3.2 Our organisation is a multinational organisation.	1	2	3	4	5
3.3 Our organisation makes use of foreign staff members to pass on skills learnt to employees.	1	2	3	4	5
3.4 Our organisation purely makes use of in house training to pass on skills and knowledge to employees.	1	2	3	4	5
3.5 This in house training takes the form of formal in house courses, on the job training, or a combination of both.	1	2	3	4	5
3.6 Our organisation makes use of education providers such as universities and technikons to provide training.	1	2	3	4	5
3.7 Programmes and courses offered by the above institutions are formulated in conjunction with organisations in our industry.	1	2	3	4	5

4. MENTORING

The process of transmitting skill and knowledge from an experienced manager to his protégé is used worldwide, especially, but not only, in employment equity instances

Please indicate the degree to which you agree/disagree with the following statements.

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
4.1 Our organisation believes that a mentoring programme is essential to affirmative action.	1	2	3	4	5
4.2 Our organisation makes use of a structured mentoring programme to pass on knowledge and skills to their proteges.	1	2	3	4	5
4.3 Our organisation makes use of an informal mentoring programme to pass on knowledge and skills to their proteges.	1	2	3	4	5

ANNEXURE 5.2

11 Douglas Rd,
Vincent,

East London.
5247

2nd December 2000

For attention: The Owner/ Manager/ Director

Dear Sir/ Madam

SURVEY ON METHODS TO BUILD UP WORLD CLASS SKILLS IN A CLUSTER UNDER CURRENT LABOUR LEGISLATION

Kindly find attached a questionnaire relating to the above. Your assistance in completing the questionnaire by 15th December would be greatly appreciated. Completion of the questionnaire should take no more than 20 minutes of your time.

When completed please forward to the undersigned in the self-addressed envelope provided. Should you wish to receive a copy of a summary of the findings, please indicate and it will be forwarded to you in due course.

Your co-operation in completing the questionnaire is greatly appreciated.
Yours faithfully,

Andy Maritz
MBA Student, Port Elizabeth Technikon