AN ANALYSIS OF RESTRUCTURING AND WORK DESIGN USED BY MANUFACTURING ORGANISATIONS IN RESPONSE TO CHANGING GLOBAL FORCES

BY

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DECLARATION

“I Ashley William Kapp hereby declare that:

- the work in this dissertation is my own original work;

- all sources used or referred to have been documented and recognised; and

- this dissertation has not been previously submitted in full or partial fulfilment of the requirements for an equivalent or higher qualification at any other recognised education institution.”

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ABSTRACT

Due to the continual increase in competitive pressure from international organisations, it has become necessary to assess the degree of transformational change within South African organisations to overcome the effect of global forces. Transformation was investigated in terms of organisational restructuring and the various work designs that are utilised by organisations to deal with the effect of global forces. To examine the main problem, three sub-problems were identified.

The first sub-problem that had been identified dealt with the extent of which global forces impacted on the business environment. It was investigated by evaluating various economic, technological and socio-political forces. From the results it may be concluded that global forces have a large impact on the local business environment.

The second sub-problem looked at the degree to which work designs assisted organisations to manage the effect of global forces. It was evident that the flexible types of work designs were more readily utilised to optimise productivity and employee moral.

Finally, the third sub-problem investigated the various structures that organisations could adopt to deal with the effect of global forces. Organisational structures were analysed in terms of customer orientation, fulfilment of company objectives and the types of structures that are used within organisations. The results showed that 75% of the sample population believed that their organisational structures co-ordinated all activities within their organisations. Feedback on the type of structures that were used by organisations revealed that various types are being used.
V

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

LIST OF ANNEXURES
LIST OF FIGURES
LIST OF TABLES
LIST OF GRAPHS
LIST OF ABBREVIATIONS

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1 INTRODUCTION AND BACKGROUND

1.2 PROBLEM STATEMENT

1.3 SUB-PROBLEMS

1.3.1 The first sub-problem

1.3.2 The second sub-problem

1.3.3 The third sub-problem

1.4 THE HYPOTHESIS

1.4.1 The first hypothesis

1.4.1.1 First sub-hypothesis

1.4.1.2 Second sub-hypothesis

1.4.1.3 Third sub-hypothesis

1.4.1.4 Fourth sub-hypothesis

1.4.1.5 Fifth sub-hypothesis

1.4.2 The second hypothesis

1.4.2.1 First sub-hypothesis

1.4.2.2 Second sub-hypothesis
1.4.2.3 Third sub-hypothesis 6
1.4.2.4 Fourth sub-hypothesis 6
1.4.2.5 Fifth sub-hypothesis 6

1.4.3 The third hypothesis 6
1.4.2.1 First sub-hypothesis 6
1.4.2.2 Second sub-hypothesis 7
1.4.2.3 Third sub-hypothesis 7
1.4.2.4 Fourth sub-hypothesis 7
1.4.2.5 Fifth sub-hypothesis 7

1.5 DELIMITATION OF THE RESEARCH 8
1.5.1 Size of the organisation 8
1.5.2 Geographical demarcation 8
1.5.3 Type of organisation 8

1.6 DEFINITIONNS OF SELECTED CONCEPTS 8
1.6.1 Structure 8
1.6.2 Manufacture 9
1.6.3 Organisations 9
1.6.4 Manufacturing organisation 9
1.6.5 Restructuring 9
1.6.6 Work design 9
1.6.7 Analysis 9
1.6.8 Change 10
1.6.9 Global forces 10
1.7 ASSUMPTIONS MADE

1.8 THE SIGNIFICANCE OF THE RESEARCH

1.9 OBJECTIVES OF THE RESEARCH

1.9.1 The first objective

1.9.2 The second objective

1.10 RESEARCH METHODOLOGY

1.10.1 Literary survey

1.10.2 Empirical study

1.10.3 Developing of an integrated model

CHAPTER 2: THE IMPACT OF GLOBAL FORCES ON THE BUSINESS ENVIRONMENT

2.1 INTRODUCTION

2.2 AN OVERVIEW OF THE GLOBAL FORCES THAT INFLUENCE CHANGE

2.2.1 Economic forces

2.2.1.1 International competition

2.2.1.2 Organisational resources

2.2.1.3 Mergers and acquisitions

2.2.2 Technological and environmental forces

2.2.2.1 New technology

2.2.2.2 Operating environments

2.2.3 Social / political forces
3.3.1 Definitions of organisational structures

3.3.2 Deciding on the organisational structure

3.3.2.1 Specialisation of jobs
3.3.2.2 Delegation of authority
3.3.2.3 Departmentalisation
3.3.2.4 Span of control

3.3.3 Dimensions of organisational structures

3.3.3.1 Formalisation
3.3.3.2 Centralisation
3.3.3.3 Complexity

3.3.4 Functions of organisational structures

3.3.5 The relation between the organisational strategy and the structure

3.3.6 Mechanistic structures versus organic structures

3.3.6.1 Mechanistic Model
3.3.6.2 Organic Model

3.3.8 Other organisational structures

3.3.8.1 The Matrix Organisation
3.3.8.2 The Multidivisional (M-Form) Organisation
3.3.8.3 The Network Organisation
3.3.8.4 Work Teams
3.3.8.5 The Complete Organisation

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION
## WHAT IS RESEARCH DESIGN

### 4.2.1 The concept of research

### 4.2.2 The concept of design

### 4.2.3 Validity and reliability

## METHODOLOGICAL APPROACHES

### 4.3.1 Quantitative research

### 4.3.2 Qualitative research

### 4.3.3 Triangulation

## CHOOSING THE MOST APPROPRIATE RESEARCH METHOD

## RESEARCH GOALS AND STRATEGIES

### 4.5.1 Research goals

### 4.5.2 Research strategy

### 4.5.3 The population

### 4.5.4 General procedure

## CONCLUSION

### CHAPTER 3: ANALYSIS OF THE RESULTS

## INTRODUCTION

## BUSINESS ENVIRONMENTAL INFLUENCES

### 5.2.1 Environmental factors that are analysed by organisations.

### 5.2.2 Important environmental factors within organisations

### 5.2.3 Internal environmental factors that are analysed by organisation.

### 5.2.4 Environmental analysis issues within organisations

## GLOBAL FORCES
5.3.1 Various pressures that are exerted on organisations by global forces.

5.4 ECONOMIC FORCES

5.4.1 Organisational competitiveness

5.4.2 Technical advantage within organisations

5.5 ORGANISATIONAL WORK DESIGN

5.5.1 Work design within the organisational environment.

5.5.2 Job analysis and job design within organisations

5.5.3 Job rotation, job enlargement and job enrichment.

5.5.4 Job characteristics

5.6 ORGANISATIONAL STRUCTURES

5.6.1 Customer orientation

5.6.2 Fulfilment of company objectives.

5.6.3 Structures that are utilised within organisations.

5.7 INTERVIEWS

5.8 CONCLUDING REMARKS

CHAPTER 6: TESTING THE HYPOTHESES

6.1 INTRODUCTION

6.2 THE FIRST HYPOTHESIS

6.3 THE SECOND HYPOTHESIS

6.4 THE THIRD HYPOTHESIS
LIST OF FIGURES

1. Figure 3.1 Job design and job performance 36
2. Figure 3.2 The Job Characteristics Model 54
3. Figure 3.3 Differentiating between Line and Staff Positions 70
4. Figure 3.4 Mechanistic versus Organic models 81
5. Figure 3.5 The Matrix Organisation 84
6. Figure 3.6 The Multidivisional (M-Form) Organisation 87
7. Figure 4.1 Interaction between quantitative and qualitative research 99
## LIST OF TABLES

<table>
<thead>
<tr>
<th></th>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Table 3.1 Interview Method</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Table 3.2 Behavioural Event Interview Method</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Table 3.3 Survey Method</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Table 3.4 DACUM Method</td>
<td>42</td>
</tr>
<tr>
<td>5</td>
<td>Table 3.5 Observation Method</td>
<td>43</td>
</tr>
<tr>
<td>6</td>
<td>Table 3.6 The two main approaches to job design</td>
<td>47</td>
</tr>
<tr>
<td>7</td>
<td>Table 3.7 Scientific Management versus Craftsmanship</td>
<td>66</td>
</tr>
<tr>
<td>8</td>
<td>Table 3.8 Structures to strategy relationship</td>
<td>79</td>
</tr>
<tr>
<td>9</td>
<td>Table 3.9 Mechanistic versus Organic models</td>
<td>82</td>
</tr>
<tr>
<td>10</td>
<td>Table 4.1 Differences between qualitative and quantitative research</td>
<td>96</td>
</tr>
</tbody>
</table>
11. Table 4.2 Sample population
12. Table 4.3 Population as per collection instrument
13. Table 4.4 Question categories on questionnaire
14. Table 5.1 Analysis of environmental factors
15. Table 5.2 Environmental factors and their rating of importance
16. Table 5.3 Frequency of analysis of certain environmental factors
17. Table 5.4 Environmental issues that were investigated during the survey
18. Table 5.5 Evaluation of the extent of the pressure that is exerted by global forces
19. Table 5.6 The effect of economic forces on organisational competitiveness
20. Table 5.7 Evaluation of the technical advantages within organisations
21. Table 5.8 Evaluation of the work design methods within organisations
22. Table 5.9 Evaluation of Job analysis and job design within organisations
23. Table 5.10 Evaluation of job rotation, job enlargement and job enrichment within organisations
24. Table 5.11 Evaluation of various Jon characteristics within organisations
25. Table 5.12 The extent to which organisational structures meet the needs of customers
26. Table 5.13 The extent to which the structure satisfies the company objectives 125
27. Table 5.14 Various structures that are used by organisations 126
28. Tables 5.15 Information regarding the people the people that were interviewed 127
29. Table 6.1 The impact of global forces on the business environment 135
30. Table 6.2 The extent to which organisational structures and work designs assist organisations to deal with the effect of global forces 138
31. Table 6.3 Organisations adopt different structures and work designs to deal with the effect of global forces 141

xvii

LIST OF GRAPHS

1. Graph 5.1 Analysis of environmental factors 109
2. Graph 5.2 Environmental factors and their rating of importance 110
3. Graph 5.3 Frequency of analysis of certain environmental factors 111
4. Graph 5.4 Environmental issues that were investigated during the survey 112
5. Graph 5.5 Evaluation of the extent of the pressure that is exerted by global forces 114
6. Graph 5.6 The effect of economic forces on organisational competitiveness 115
7. Graph 5.7 Evaluation of the technical advantages within organisations

8. Graph 5.8 Evaluation of the work design methods within organisations

9. Graph 5.9 Evaluation of Job analysis and job design within organisations

10. Graph 5.10 Evaluation of job rotation, job enlargement and job enrichment within organisations

11. Graph 5.11 Evaluation of various Jon characteristics within organisations

12. Graph 5.12 The extent to which organisational structures meet the needs of customers

13. Graph 5.13 The extent to which the structure satisfies the company objectives

14. Graph 5.14 Various structures that are used by organisations

15. Graph 6.1 The impact of global forces on the business environment

30. Graph 6.2 The extent to which organisational structures and work designs assist organisations to deal with the effect of global forces

31. Graph 6.3 Organisations adopt different structures and work designs to deal with the effect of global forces
List of abbreviations:

- AIDS – Acquired Immune Deficiency Syndrome
- DACUM – Developing a Curriculum
- HIV – Human Immunodeficiency Virus
- HR – Human resources
- JASR – Job analysis at the speed of reality
- OEM – Original equipment manufacturers
Chapter 1
THE PROBLEM AND ITS SETTING

1.1 INTRODUCTION AND BACKGROUND

Wilson (1995: 356) notes that local organisations are facing challenges of global competition and development. Companies, which try to resist the changes that globalisation places on them, decrease their ability to survive due to stagnation and lack of innovation. The inability to be flexible may lead to the incapability of overcoming the threat posed by global forces, such as technology, competition, size and monetary power. Howard and Associates (1994: 85) believe that environmental changes in the form of global forces are forcing organisations to consider radical transformations.

According to Lewis (1996: 4), these global forces create fierce competition in the form of customers who are becoming more demanding in what they want
concerning prices and quality of the products. The global market is thus offering them extra sourcing potential and larger varieties to choose from.

Lewis’s (1996: 4) advice to organisations on how to meet these challenges is to undergo radical changes in their structures. Lewis (1996: 4), comments that many organisations change to a flatter and leaner structure and that other organisations are experimenting with newly developed structures to deal with the changing demands of the volatile market environment. These new structures are designed to adapt organisations to a more fluid and efficient change programme.

Dawson (1994: 18) comments that strategies are of vital importance to achieve a workable arrangement between organisational structure and functional performance. Donaldson (1987: 7) supports Dawson’s comment by mentioning that structural change is contingency driven. This implies, that changes in an organisation that are not appropriate may disrupt the performance of the organisation and may require an adjustment of organisational structure to improve on the effectiveness.

According to Limerick and Cunnington (1993: 205), organisations require transformational change to overcome global forces. However, transformation does not only consist of restructuring of the organisation, but of various other changes including competitive work designs.
Jamieson and O’Mara (1991: 9) advise that since work forces are changing to adapt to global forces, the most efficient way of managing these changes is to be flexible. This includes making required adjustments and knowing all subordinates in such a way that treatment may be individualised to a large extent.

1.2 PROBLEM STATEMENT

Against the background of these challenges and the organisation’s effort to survive in the highly competitive and turbulent environment, the main research problem arose as:

What structural and work designs can manufacturing organisations use to deal with the effects of global forces?

1.3. SUB-PROBLEMS

To examine the main problem, the following sub-problems were identified:
1.3.1 The first sub-problem:
How and to what extent do global forces impact on the business environment?

1.3.2 The second sub-problem:
How and to what extent do work designs assist organisations in managing the effects of global forces?

1.3.3 The third sub-problem:
What different organisational structures should organisations adopt to deal with the effects of global forces?

1.4 THE HYPOTHESES

The following three main hypotheses were formulated from the sub-problems that were identified. These main hypotheses could not be tested directly and thus had to be broken down into sub-hypotheses.

1.4.1 The first hypothesis:

H₀: Global forces have an impact on the business environment.
Hₐ: Global forces have no impact on the business environment.

1.4.1.1 First sub-hypothesis:

H₀: Global forces influence the economic conditions of a company.
Hₐ: Global forces do not influence the economic conditions of a company.

1.4.1.2 Second sub-hypothesis:

H₀: Global competitors have, to a large extent, influenced organisations to be more proactive in competing for higher standards and market share.
$H_0$: Global competitors have not influenced organisations to be more proactive in competing for higher standards and market share.

1.4.1.3 Third sub-hypothesis:

$H_0$: Global competitors have influenced the organisation to alter its business strategies.

$H_a$: Global competitors have not influenced the organisation to alter its business strategies.

1.4.1.4 Fourth sub-hypothesis:

$H_0$: Strong competition has influenced the organisation to such an extent that it had to continuously improve its business performance.

$H_a$: Strong competition has not influenced the organisation to such an extent that it had to continuously improve its business performance.

1.4.1.5 Fifth sub-hypothesis:

$H_0$: The latest technological advancements play a big role in organisational competitiveness.

$H_a$: The latest technological advancements do not play a big role in organisational competitiveness.

1.4.2 The second hypothesis:

$H_0$: Work designs and organisational structures can assist organisations in managing the effects of global forces.
H₀: Work designs and organisational structures cannot assist organisations in managing the effects of global forces.

1.4.2.1 First sub-hypothesis:
H₀: The environment has influenced the current methods of work design.
Hₐ: The environment has not influenced the current methods of work design.

1.4.2.2 Second sub-hypothesis:
H₀: The current work design of organisations satisfies the need of the external environment.
Hₐ: The current work design of organisations does not satisfy the need of the external environment.

1.4.2.3 Third sub-hypothesis:
H₀: The current work design in organisations makes it possible for them to be globally competitive.
Hₐ: The current work design in organisations does not make it possible for them to be globally competitive.

1.4.2.4 Fourth sub-hypothesis:
H₀: Organisations fully utilise their workforce’s skills and abilities.
Hₐ: Organisations do not fully utilise their workforce’s skills and abilities.

1.4.2.5 Fifth sub-hypothesis:
\( H_0: \) The creativeness and flexibility of the employees within the organisation are fully utilised to maximum potential.

\( H_a: \) The creativeness and flexibility of the employees within the organisation are not fully utilised to maximum potential.

1.4.3 The third hypothesis:

\( H_0: \) Organisations adopt different structures and work designs to deal with the effects of global forces.

\( H_a: \) Organisations do not adopt different structures and work designs to deal with the effects of global forces.

1.4.3.1 First sub-hypothesis:

\( H_0: \) Organisations do meet the needs and demands of customers.

\( H_a: \) Organisations do not meet the needs and demands of customers.

1.4.3.2 Second sub hypothesis:

\( H_0: \) Current organisational structures make it possible for organisational requirements to be met.

\( H_a: \) Current organisational structures do not make it possible for organisational requirements to be met.

1.4.3.3 Third sub-hypothesis:

\( H_0: \) Current strategies influence organisational structures.

\( H_a: \) Current strategies do not influence organisational structures.

1.4.3.4 Fourth sub-hypothesis:
$H_0$: Organisations optimise their resource utilisation.

$H_a$: Organisations do not optimise their resource utilisation.

1.4.3.5 Fifth sub-hypothesis:

$H_0$: Organisations have flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.

$H_a$: Organisations do not have flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.

1.5 DELIMITATION OF THE RESEARCH

For the research structure to be manageable, the research area was delineated as follows:

1.5.1 Size of the organisation

Organisations employing more than 100 employees were used in this study. The motivation behind this is that larger organisations will have a more diverse work force and a more complex structure, which may be influenced by global forces.

1.5.2 Geographical demarcation

The empirical component of this study was limited to organisations within the Eastern Cape region. This region includes the industrial areas of Port Elizabeth, Uitenhage and East London.
1.5.3 Type of organisations

The research was limited to manufacturing organisations. The reason is that local and global forces exert pressure on manufacturing organisations, compelling them to transform their organisations into more competitive entities.

1.6 DEFINITIONS OF SELECTED CONCEPTS

1.6.1 Structure

According to Mullins (2002: 301), structure refers to how the individuals and groups in an organisation are organised or grouped together to accomplish the goals of the organisation.

1.6.2 Manufacture

Pheysey (1993: 56) believes that manufacturing is the process of first obtaining components or raw materials and then adding value by transforming them into a more superior end product.

1.6.3 Organisations

According to Ivancevich and Matteson (1996: 695) organisations are institutions that make it possible for society to pursue objectives that could not be obtained by individuals acting alone.

1.6.4 Manufacturing organisation

Pheysey (1993: 56) defines a manufacturing organisation as a company that obtains raw materials, adds something to the raw material in the production department that increases its value, and sells it at a higher price.
1.6.5 Restructuring

Thompson (1997: 512) defines restructuring as follows:

“The strategy pursued by conglomerates, which requires the identification of companies that are under-performing and transforming them with the assistance of new management skills”.

1.6.6 Work design

Carrell, Elbert and Hatfield (1995: 109) define work design as follows:

“The manipulation of the content, functions and relationships of jobs in a way that both accomplishes organisational purposes and satisfies the personal needs of individual jobholders”.

1.6.7 Analysis

*The Concise Oxford dictionary* (1990: 38) defines analysis as follows: “A detailed examination of the elements or structure of a substance.”

1.6.8 Change

Change is defined by *The Concise Oxford dictionary* (1990: 187) as: “The act or an instance of making or becoming different.”

1.6.9 Global forces

Ivancevich and Matteson (1996: 3) view global forces in the following way:

“Global competition characterised by networks that bring together countries, institutions and people”.

1.7 ASSUMPTIONS MADE

International authors (not South African) have written most of the available research literature. It was thus necessary to assume that the relevant research literature would also be applicable to South African organisations.
1.8 THE SIGNIFICANCE OF THE RESEARCH

The theory covers the aspects of restructuring and work design, and how they can be of use to the organisation. Dawson (1994: 27) describes current work restructuring as a movement towards the development of multi-skilled, self-regulatory workgroups who liaise with teamwork supervisors on the shop floor. The research may also offer advice to organisations on how to utilise their human resources in a more effective way. Case studies of organisations, which have already experienced similar processes of restructuring, will offer other companies information on how restructuring was achieved and whether they were successful.

Effective work design is important for the proper functioning of any manufacturing organisation, especially in organisations which have adopted a flatter and leaner structure where the workload has to be covered by fewer people and where high production capacities are in demand.

Organisations will be offered methods of dealing with the effects of global forces. This study may prove useful to the people in organisations who deal with decisions on restructuring and work design. Examples of these people are managing directors, human resources practitioners and employees acting as change agents.

1.9 OBJECTIVES OF THE RESEARCH
The following objectives will be covered in this research study:

1.9.1 First Objective:

To analyse the restructuring and work design methods used by manufacturing organisations in response to the changes brought about by global forces.

1.9.2 Second Objective:

To use additional information obtained from relevant literature to enhance the performance of the organisations involved in restructuring and work design.

1.10 RESEARCH METHODOLOGY

The following procedure will be adopted to deal with the main and sub-problems.

1.10.1 Literature survey

The different organisational structures and work designs that are available to organisations and the various effects that they should have on an organisation were identified from the literature. This information was viewed as a means to deal with the consequences of global forces.

1.10.2 Empirical study

The empirical study involved the following:

- Mail survey

A mail survey was conducted among selected manufacturing organisations by means of a detailed questionnaire. This was done to establish what methods of restructuring and work
design these companies were either using or planned to use to deal with the effects of global forces.

- **Measuring instrument**
  The researcher made use of a detailed questionnaire to obtain the information that was required.

- **Sample**
  A random sample consisting of manufacturing organisations employing more than 100 people and which are located in the Eastern Cape region was used for the mail survey.

- **Statistical analysis of data**
  The statistical procedures were used to analyse and interpret the data obtained from the questionnaire, were conducted with the assistance of a statistician during the planning stage of the questionnaire.

### 1.10.3 Developing an integrated model

The results of the literature study and the empirical survey were integrated to develop a practical and achievable model for implementing organisational structures and work designs for the future.
CHAPTER 2:
THE IMPACT OF GLOBAL FORCES ON THE BUSINESS ENVIRONMENT

2.1 INTRODUCTION

According to Kanter (1995: 11), globalisation is one of the most powerful and pervasive influences that today’s nations, organisations and communities face. Kanter (1995: 22) describes globalisation as the need to compete for the highest standards and market share, through the ability to manipulate resources beyond a country’s borders.

Global forces are causing regimes to topple, large organisations to rethink their strategies, work designs and structures, governments to privatise more services and consumers to experience the world/global village as their supplier (Kanter, 1995: 11).

From Kanter’s statements in the first two paragraphs of this chapter, it can be seen that global forces affect organisational structures and work designs in various ways. The rest of the chapter will outline the different impacts that global forces have on organisational structures and work designs.

Kanter (1995: 28) is of the opinion that in the current organisational situation, employees spend many days under the shadow of global forces that can dramatically alter their futures. Their career fates may ultimately be determined to a lesser extent by their own performance as
individuals, but largely by decisions made in the boardrooms of their own company, and also in the boardrooms of key suppliers, major customers or institutional investors.

2.2 AN OVERVIEW OF GLOBAL FORCES THAT INFLUENCE CHANGE

Thomas, O’Neal and Kelly (1995: 113) advise that for a company to be part of the global village it needs to organise and manage the complexity of several business units. Research has shown that there are three characteristics that are inherent to the nature of global organisations, namely:

- size,
- local responsiveness and
- transfer of knowledge across borders.

Industry-specific advantages are the biggest contribution towards the global success of any organisation. According to Thomas et al (1995: 117), these include:

- The organisation’s relationships with its customers and suppliers
- Opportunities for co-operation, learning and improving cost positions and the quality of industry-specific products.
- Expansion of marker share, gaining of scale or scope economies and learning from other markets or customers.

Organisation-specific advantages include:

- Monopolistic advantages,
- Ownership advantages,
- Core competences,
- Technological innovation,
- Specialised knowledge,
- Strategic assets and resources and
- Strategic decisions that create large, irreversible commitments.
Thomas et al (1995: 117) believe that these advantages may however be worthless if they do not fit within the organisational culture and operations of a specific organisation. It is thus a combination of country-, industry- and organisational-specific advantages that create the required conditions for organisations to compete successfully within international markets.

Global forces can be explained in terms of economic forces, which include international competition, organisational resources, mergers and acquisitions, technological forces in the sense of new technology and operating environments and finally socio-political forces by looking at the global work force.

### 2.2.1 Economic forces

#### 2.2.1.1 International competition

International competition, according to McLagan and Nel (1995: 16), is continuously becoming more of a problem to South African organisations, especially the small-medium enterprises, because trade barriers are continuously being reduced. This makes it difficult for emerging, new organisations to grow strong enough to stand their ground against the larger competitors. Changes to the organisational environment may cause sudden redundancy of these smaller organisations without a large portion of the employees even being aware of the extent of the changes that are taking place. This could then ultimately lead to retrenchment of employees.

Heizer and Render (1996: 43) support McLagan and Nel’s statement by adding that the world has become one interconnected economy, otherwise known as a ‘global village’, where the economies of one country are directly affected by the economies of many others. Jeannet (2000: 27) notes that competition has intensified because of the sudden appearances of new players who have diversified into new markets. Diversification is in turn made possible by
new communication technologies. Distance no longer exists as a barrier. Competition has expanded to an extent that includes any specialist with the capability to achieve visibility in the global business field. New companies may have different cost bases with which they gain an advantage over established players. This pushes companies to strive to improve their efficiency on a continuous basis.

Robbins (1998: 2) states that multinational organisations monitor the world for the possibility of competitive advantages. This makes it possible to strategically place production, sales and marketing to give the company planned competitive advantages in the market place. Hibbert (1997: 2) adds to Robbins’s statement by mentioning that some multi-national organisations have operations that are large enough to influence global markets. Balle (1995: 12) sides with Kanter (1995: 22) by stating that because the world has become a global village, competitive pressure between the organisations has increased. This pressure may largely be transferred to the work force in an attempt to increase productivity. According to Hibbert (1997: 4), an investigation into why organisations in certain countries compete better internationally than others identified four national attributes, which determine the economic environment experienced by domestic companies:

- The nature of competition and the sources of competitive advantage differ widely among industries;
- Successful global competitors perform some activities in the “value chain” away from their home country and by doing this make use of competitive advantages from their entire world wide network not only their home base;
- Competitive advantage in today’s international competition is gained and sustained by companies by means of continuous innovation; and
- Only the firms that react early and aggressively will be able to gain a competitive advantage in an industry.
Flaherty (1996: 42) states that due to growing international competition, the following three changes in business strategies are prominent in many global industries.

- Product lines need to be extended and business performance continuously improved, because companies now have to compete in several markets.
- International operations have become more viable which in turn increases the pressure to spread operations to more countries, thus also increasing competitive pressure.
- Networks of international operations give companies the opportunities to combine and integrate a large number of resources to use to their advantage.

Kanter (1995: 29) is of the opinion that globalisation is made easier by international competition, which is assisted by modern international travel and communication systems. Jeannet (2000: 162) believes that modern global companies are moving away from diversifying business towards focusing on a global niche market strategy. In doing this, they are selling off other non-core divisions to focus only on core activities. They are thus able to reach the whole world with available resources and strengthen their strategic position.

However, Johnson and Scholes (1999: 107) suggest that global competitors are increasing dramatically, which again encourages further globalisation. Funds generated from low-cost production sites may in certain cases be used to subsidise competitive actions in higher-cost areas, making it difficult for local competitors to remain profitable.
Desseler (1997: 13) summarises all the above mentioned statements in the following quotation:

“The increasing internationalisation of businesses and intensified competition means that downsizing is now a continuing corporate activity. At the same time, increasing competition and shorter product life cycles are creating the need for more flexible, adaptable companies. These are more decentralised and participative and rely on co-operative project teams to ‘entrepreneur’ new products and to fulfil customers’ needs.”

2.2.1.2 Organisational resources

Gomez-Mejia, Balkin and Cardy (1998: 51) mention that global forces have the advantage of utilising resources from their many branches over the world in order to dominate the local organisations, which are competing in the same market. Raw materials and spare parts may be obtained in a much shorter space of time compared with the availability to local organisations. The reason is that close relationships are often formed between borderless organisations and their suppliers, distribution channels and customers. Robbins (1998: 189) adds to Gomez-Mejia et al.’s statement by mentioning that resource scarcity and the proximity of appropriate substitutes for a specific resource play an important role in the survival of an organisation. An example that is used is the skills that are possessed by certain individuals in the organisation. If a global organisation thinks that it needs people with specific skills, they can acquire them by presenting these individuals with propositions which they may find difficult to refuse. This in turn will give the global organisation the ability to obtain the leading edge when challenging the market-share currently belonging to local organisations.

Hibbert (1997: 1) points out that certain countries have specific resources which have a higher value abroad than in the domestic economy. This enables organisations which are located in these countries to trade or market their sought after resources for those of other countries’
prominent resources. These economic exchanges create market forces which dictate the pattern of international trade.

Global organisations have the ability to move inputs and assets to any country in a very short space of time (Gibson, Ivancevich and Donnelly, 1994: 57). This allows them to source capital internationally, utilise materials obtained from plants in low-labour-cost countries and make use of skills, expertise and suppliers available to them in other countries. Hibbert (1997: 9) believes that third world countries urgently need to export more finished products instead of raw materials in the form of natural resources. By doing this, more value gets added, which increases earnings of worthwhile currency. These currencies in turn could then be used to acquire industrial goods, services and technology from higher industrialised countries.

2.2.1.3 Mergers and acquisitions

Greengard (1997: 1) notes that in a survey that was completed in 1996 by a New Jersey-based Securities Data Co, there were more than 10200 mergers in the United States alone. These mergers involved approximately 659 billion dollars.

Greengard (1997: 1) is of the opinion that one of the reasons why companies merge is to increase growth and profits. Mergers transform companies into huge empires with business units that super impose on one another.

According to Flynn (1996: 2), companies merge to have more global influence. Mergers give organisations the opportunity to grow overnight, thus increasing their market share to record heights. This in turn gives them the power to dominate markets and maintain high profiles. Flynn (1996: 3) also points out that a company which offers a larger variety of services will attract more customers.
Flynn advises that the compatibility of the companies that are in the process of merging affects the success of the merger to a large extent. Marmer Solomon (1998: 4) explains that the human resources department plays a vital role in the transition and integration stages by communicating the planned strategy, smoothing out potential conflicting situations and integrating the various parties’ workforces, as well as their policies, as quickly and completely as possible.

Greengard (1997: 3) mentions that an understanding of the inner cultures of each company is essential to the success of the merger. The reason is that the company would then comply with laws and regulations and in the process make the merger come together faster and with less conflict.

Greengard (1997: 4) emphasises that the human issue of the merger process is a key element in the success or failure of the entire process. Due to the fact that successfully combining of the cultures that are involved is such a critical issue, a variety of tools should be used to coalesce cultures. These include workshops, network teams and task forces. It is also important for the Human Resources Department to discuss the metamorphosis which is about to take place and the impact that it will have on the employees who are involved. During this period honesty and the clear and accurate flow of information is very important to avoid unnecessary panic. To assist with the change-over, means such as venting sessions and forums should be made available to give employees the chance to get clear answers to their questions which will make the situation less stressful for them.
Flaherty (1996: 406) remarks that by the successful formation of mergers, products and services are improved upon to a large extent. This is made possible by combining the ideas and knowledge of operations of both companies. This in turn will lead to the berth of a new, super company. Flynn (1996: 4), agrees with Flaherty by stating that mergers will increase the efficiency of companies and lower expenses by retaining the best, most productive employees.

### 2.2.2 Technological and environmental forces

#### 2.2.2.1 New technology

According to Gibson et al (1994: 58), the availability of innovative technology, especially in a volatile environment, can have a major impact on the importance of the geographical location of an organisation. New technology may give an organisation that leading advantage to capture additional market share.

Technology is the equalising factor of the future (Bennis and Mische, 1995: 25). The organisations that implement the technology and use it to develop even better technology will have the upper hand at the end of the day. Organisations that resist the new technology might not be in business very long.

Banner and Gagne (1995: 248) have the following views on new technology:
“Information technology, in the form of micro computing, electronic communication, and robotics, has the capacity to transform the nature and structure of many organisations and the nature and life cycles of their products and services. Organisations that fail to get ‘on board’ and reap the potential will the competition passing them by. The technology is leading companies into a new age in which completely new styles of organisations and new managerial competencies will come into their own.”

Kanter (1995: 25) notes that global organisations develop new technology and make use of it, but also establish alliances and networks with other global competitors in other countries. He adds that innovative organisations may use new technology to by-pass established organisations, rather than competing on the same level. The example that he uses is cellular and satellite systems which are by-passing land-wire telephone systems.

2.2.2.2 Operating Environments

Thomas et al (1995: 114) define a country-specific advantage as an advantage that is available to all organisations which operate in that specific country by only being there. Examples which are mentioned are wages, cost of capital, labour cost, university education, communication systems, political and cultural factors. These general factors are related to the history of that country and the evaluation of its social and economic structure. These conditions may lead to a country’s general culture of innovation and creativity. The external environment influences organisational strategy through the availability of critical resources and the likely returns from critical resources. Organisations gain an advantage by continuously scanning the business environment in which they operate.
Another example of global forces exploiting or making use of opportunities in other countries is the use of precious metals in the catalytic converter industry in South Africa, where a motor industry development programme was implemented in mid-1996 (Algorax training notes: 3). This programme will run until 2012, where after it should be reviewed, and states that as far as catalytic converters are concerned; OEM’s (original equipment manufacturers) and automotive catalytic converter canners are entitled to claim 90% of the precious metals’ value and 40% of the local content. For this reason, all the global competitors in automotive catalyst manufacturing have established themselves in South Africa, although their head offices are located abroad, where they originated.

Banner and Gagne (1995: XII) advise that the stability or complexity of the environment around the organisation is an important consideration when determining its structure and work design. This is because the organisation should be able to satisfy the needs of the environment in order to stay profitable. From the above mentioned, it is clear that Banner and Gagne (1995: XII) support Thomas et al (1995: 114) in believing that global forces influence the environment to a large extent.

Banner and Gagne (1995: 205) argue that organisations must consider flexible matrix or organic structures when operating in complex, interdependent and turbulent organisational environments. Due to their size and influence, global organisations have the ability to influence the environments in which they operate to a large extent in order to benefit them, thus creating their own opportunities.

Callahan, Fleenor and Knudson (1986: 314) believe that both the direction and the intensity of organisational change, which may be manipulated by global organisations, will alter the structural and work design of the organisations involved. Especially in a turbulent environment where information becomes
obsolete within a short time, predicting the trend of the environment is of vital importance to the survival of the organisation. According to Johnson and Scholes (1999: 105), there are various analyses that can be done to identify the political, economic, social and technological influences that are present in the organisational environment.

Burnes (1996: 60) advises that environmental uncertainty and dependence due to the influences of global organisations make organisations vulnerable, and may even cause their downfall. These levels of uncertainty regarding the organisational environment must be taken into consideration when designing organisational structures and work designs.

2.2.3 Social / political forces

2.2.3.1 The global workforce

There are a variety of environmental factors that may influence human resources planning. These include HIV / AIDS, affirmative action, brain drain and trade unions.

- **HIV / AIDS** – Micheal (2001: 37) notes that in South Africa manufacturing accounts for 22% of the economy and that HIV / AIDS will impact negatively on direct and indirect production costs. The reason is that it kills adults during their most productive years between the ages of 20 and 50. Liebenberg (2001: 2) explains that approximately 4.7 million people had AIDS in South Africa at the beginning of 2000 and that this number was estimated to increase at an alarming rate of 1700 infections per day.
• **Affirmative Action** – It is an anti-discriminative measure that is reinforced by legislation. According to Smit and Morgan (1996: 324), affirmative action deals primarily with the recruitment and placement of individuals previously discriminated against on the basis of race and gender, into positions that were occupied by whites before. Affirmative action is based on artificial corrective action to create a workforce that is more demographically representative at all levels. Affirmative action candidates may abuse the system to advance in their existing jobs, or job-hop.

• **Brain Drain** – The loss of skilled people from a country, which results in low economic growth, is known as brain drain. Companies are thus losing the “cream” of their employees to the richer, first world countries. Lester, Nel and Binns (2000: 271) state that South Africa has lost an enormous number of highly qualified professionals in this way.

• **Trade Unions** – Basson, Christianson, Garbers, Le Roux, Mischke and Strydom (1998: 32) define a trade union as an association of employees whose principal purpose is to regulate relations between employers and employees, including any employer organisation. Their biggest contribution has been improving and increasing the number of benefits initiated by employers. According to Gerber, Nel and van Dyk (1998: 347), the relationship between the trade union and the employer entails an acknowledgement of their conflict of interests and an appreciation of the need to compromise.

In his survey of five random cities, Kanter (1995: 42) reveals that the results indicated that companies recruit locally for unskilled workers, nationally for reasonable to high skilled workers and internationally for the highest skills levels. A multi skilled workforce is the foundation for technological advancement and a victorious organisation (Flaherty, 1996: 265). A study done by Flaherty, revealed that 40 percent of the workforce in the average Japanese company, consisted of university educated engineers, compared with the United State’s...
companies, where only eight percent of the workforce consisted of university educated engineers.

Gerber et al (1998: 225) has the following comment regarding the South African workforce:

“The skills of your staff are always critical in an organisation, but with globalisation the scenario has become so much more competitive.”

As an example of South Africa’s problem concerning the workforce, Gerber et al (1998: 225) cites a multimillion rand construction venture in Cape Town, which recruited a project manager from the United Kingdom because a suitable candidate could not be found locally. Hibbert (1997: 4) believes that South Africa has many problems involving the average workforce in organisations today. These include union and labour pressures which are mainly due to the increasing wage demand. This leads to the fact that South Africa has one of the lowest productivity levels in the world. In addition, in comparison with the wage rate, goods in general are expensive.

Flaherty (1996: 269) mentions that results from a survey in the tyre industry revealed that productivity measured in output (kilogram) per employee were 14 in South Africa compared with 42 in Europe, 71 in USA and 100 in Asia. A
more thorough, pereto-analysis (method of identifying the vital few causes, typically 20%, which cause 80% of the problems) indicated that the largest contributors to the productivity figures were South African plants which only operated on average for 250 days per year, whereas Asian factories operated for 364 days per year. Furthermore, Asian companies pay for eight hours of work per day and in return receive eight hours of work, while in South Africa only four and a half hours of work is obtained for eight hours of pay. Another contributing factor is the instability of the South African workforce, with a high strike and labour unrest rate. From the above it was determined that the cost of labour is three times higher in South Africa compared with the newly industrialised countries of the Far East.

The level of training and competence of the labour force is one of the most determining key factors distinguishing one country above others. Countries that have access to a fair number of highly trained professional employees in the form of technicians; engineers or scientists will have a large skill-intensive export industry, whereas countries with relatively few highly skilled personnel will import skill-intensive products and usually export raw materials or low-skill intensive products (Hibbert, 1997: 4

2.3 THE INFLUENCE OF GLOBAL FORCES ON THE CORPORATE WORLD

2.3.1 The positive effects of global forces on smaller, local organisations:

Felkins, Chakiris and Chakiris (1993: 429) point out that each country has strong and weak areas to consider. A global organisation when established in South Africa, can bring with it special technology and in return get natural resources cheaper. In this way, competencies
could be shared and global synergy could facilitate the recognition of new options, relationships and worldviews,

Felkins et al (1993: 429) mention that another advantage of corporations forming global bonds is executive and organisational leadership development and change management competencies. This is achieved through exchange programmes, internships and development projects.

Hibbert (1997: 35) believes that by putting pressure on the survival instinct of local organisations, global forces encourage them to become active exporters themselves. This is achieved by investing in their own technology, obtaining expertise in specific products and by training their staff in the latest technology.

New information and communication technology together with new government trade policies and economic growth and with the threat of existing global forces have forced certain companies to expand their vision and boundaries. This was done by crossing borders to operate in other parts of the world’s markets. This also required these companies to compete aggressively by continuously improving their business performance and product lines.

Ivancevich and Matteson (1996: 3) comment that companies must invest in the training and education of their people to survive the pressures of global forces. This includes the level of recruiting, selection, retention and motivation of a very skilled workforce.

### 2.3.2 The negative effects of global forces on smaller, local organisations

Ivancevich and Matteson (1996: 617) agree with Thomas et al (1995: 114) that global competitors infiltrate global markets by introducing new products, increasing advertising, reducing prices, increasing customer services or by donating money towards the development of the local community. This may lead to some local organisations’ products no longer having consumer appeal or being too expensive when compared with the global organisation’s products that are cheaper and of a better quality.
Ivancecich and Matteson (1996: 617) add that the knowledge explosion has introduced new technology which is available to a large variety of business functions.

Balle (1995: 24) supports the above mentioned authors by stating that for organisations to be better, faster and cheaper than the average traditional neighbourly competitor is not of much use if one’s product prices are undercut by global competitors from another country.

McLagan and Nel (1995: 18) maintain that government’s anti-monopoly viewpoint has given new competition the opportunity to enter and establish themselves in previously, impenetrable markets. For this reason, business efficiency is becoming a primary driver of organisational success.

2.4 CONCLUDING REMARKS

The main objective of this study was to determine the extent of the impact that global forces have on the business environment. This was done by initially evaluating various economic, technological and socio-political forces and finally, by looking at the positive and negative effects that global forces have on the corporate world.

Chapter 3 will investigate the various work designs and structures that are used by organisations to deal with the effect of global forces and thus to remain globally competitive.
CHAPTER 3

WORK DESIGN AND ORGANISATIONAL STRUCTURES FOR DEALING WITH THE EFFECT OF GLOBAL FORCES

3.1 INTRODUCTION

Banner and Gagne (1995: XII) state that the stability of the environment around the organisation is an important consideration when determining the structure and work design of the organisation. The reason behind this statement is that the organisation should be able to satisfy the needs of the environment and yet to stay profitable. According to Callahan et al (1986: 314), both the direction and intensity of organisational change will alter the structural and work design of the organisation involved, especially in a turbulent environment.

Maritz (1999: 24) mentions that research done in South Africa has indicated that most organisations do not have the capacity or the required organisational design to compete globally. Furthermore, an effective human resources system is required to provide the necessary guidance and direction which an organisation needs to be successful. This needs to be built into the organisational structure. According to McLagen and Nel (1995: 20), it is
important for people across all levels and functions to understand how their own activities contribute to the performance of the organisation as a whole.

Gomez-Majia et al (1998: 8) argue:

"An organisation will outperform its competitors if it effectively utilises its work force’s unique combination of skills and abilities to exploit environmental opportunities and neutralise global threats."

According to Carrel, Elbert, Hatfield, Grobler, Marx and Van der Schyft (1998: 104), organisations not only need the correct structures, employees who are innovative, creative, flexible and well motivated to challenge global forces. The reason is that the success of an organisation ultimately depends on its employees.

3.2 Approaches to Job Design

Dilworth (1993: 627) notes that in order for an organisation to be successful, it must have employees who are capable and motivated to perform their work well, and the only way to accomplish this is through effective work design. Gibson et al (1988: 460) believe that job design and re-design techniques are applied for two reasons,

- To identify the most important needs of both the employees and the organisation, and
- To remove obstacles in the workplace that prevent these needs from being realised.
3.2.1 Conceptual model of job design

According to Gibson et al (1988: 460), the concepts shown in the model in figure 3.1, describe the important factors of job performance and organisational effectiveness. The model recognises that individuals react differently to activities in the workplace. Furthermore, it recognises the difficulty in satisfying both individual and organisational needs.

Figure 3.1: Job design and job performance

Source: Gibson et al (1988: 460)

3.2.1.1 Job Analysis

Carrell et al (1998: 78) explain that job analysis is a systematic method used by management to determine the tasks, duties and responsibilities needed to do specific jobs within an organisation. This includes assessing the level of decision making, the skills required to do a job adequately, the autonomy of the task and the mental state needed to do the job. Hartley (1999: 1) confirms that job analysis is a systematic process for collecting and analysing data information obtained from the work environment, job relationships and the required training needs. Hellriegel, Jackson, Slocum, Staude and Associates (2001: 246) define job analysis as the breakdown of tasks for a specific job and the personal skills required in doing the job satisfactorily. Job analysis consists of two areas:

- Job Description – This describes the position’s essential tasks and responsibilities. It also gives interested candidates the opportunity to
evaluate the job requirements and to weigh them up against the remuneration package. According to Carrell et al (1998: 90), job descriptions have no exact format and are often used for many different purposes. Several employment and compensation activities are formulated around the information contained in the job description.

- **Job Specification** – This is a list of the personal characteristics, competencies and experience that is required to do a task successfully. It is also used as a guide to filter though the candidates until the most suited one has been found. Carrell et al (1998: 96) mention that the job specification is the minimum number of qualifications required to do a specific job. These qualifications are grouped into three categories, namely

1. skills – observable capabilities performed on the job;
2. knowledge – the information required in a specific area to perform a task satisfactorily; and
3. ability – the mental and physical capability required from an employee to perform a task.

Qualifications may also include the required level of education, experience, and training to perform a job.

Hartley (1999:7) advises that job analyses should be scheduled on a regular basis to make sure that the work requirements are accurate and up-to-date. If this is not done, decisions such as the hiring and firing of employees could be based on outdated information. This could happen because jobs in today’s work environments are dynamic and can change on a daily basis.

- **Job Analysis Methods**

  Traditional job analysis methods are:

1. **One-on-one interviewing** – An interview is a powerful tool that can be used to gather information from job incumbents and managers about job requirements. The interview technique can be modified to be highly flexible or very structured. Table 3.1 shows the advantages and disadvantages of the *interview method*.

**Table 3.1: Interview Method**
## Interview Method

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific information can be gathered during the interview.</strong></td>
<td><strong>Can be slow</strong> - The interviews can be very time consuming.</td>
</tr>
<tr>
<td><strong>Allows probing and clarification</strong> – When interviewing a person, in depth questions can be asked and detailed clarification is available from the person being interviewed.</td>
<td><strong>No immediate validation or cross checking</strong> – With this method, interviews take place on a one-on-one basis, which makes it difficult to double check with the various parties who are involved.</td>
</tr>
<tr>
<td><strong>Inefficient method</strong> – The person that is conducting the interview could spend a lot of time explaining the purpose of the interview process and providing background information.</td>
<td><strong>Can be costly</strong> - Travel and accommodation costs can be prohibitive if interviews are scheduled in multiple locations. Job analyst labour costs can also be high with this method.</td>
</tr>
</tbody>
</table>

Source: Hartley (1999:8)

2. Behavioural event interviews – In this technique, created by David McClelland, trained facilitators ask a series of structured questions to the job to determine the similarities among average performers and superior performers. The respondents are asked to describe three peak successes and three major failures in short-story fashion. Several sets of interviews are conducted for each position to ensure that sufficient data is collected. Table 3.2 shows the advantages and disadvantages of the *behavioural event interview method*. 
Table 3.2: Behavioural Event Interview Method

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides insight into personality traits and other characteristics required to do the job – Interviews are used to identify the traits of average and superior performers.</td>
<td>Can be slow – The interviews can be very time consuming. The average interview takes approximately one day to conduct, analyse and transcribe.</td>
</tr>
<tr>
<td>Specific data is generated for assessment, training and organisational planning. – This method provides specific and detailed information about effective and ineffective job behaviours. It also provides actual case studies that can be used for future training development projects.</td>
<td>Requires specialised training. – Certain steps are acquired through experience and /or coaching.</td>
</tr>
<tr>
<td></td>
<td>Inefficient – This method would not be practical to evaluate a large number of jobs, because several interviews may be required to obtain adequate information to assess one position.</td>
</tr>
</tbody>
</table>
Can be costly – Travel and accommodation costs can be prohibitive if interviews are scheduled in multiple locations. Job analyst labour costs can also be high with this method.

Can miss less-obvious tasks. – This method focuses on the critical tasks only, which may render less obvious tasks vulnerable.

Source: Hartley (1999:12)

3. Surveys – With this method, information can be gathered simultaneously from a large cross section of people. Surveys consist of sets of open- and closed-ended questions that help determine the nature of the job. Care must be taken when drafting the survey and also when determining the appropriate target audience and sample size. Table 3.3 shows the advantages and disadvantages of the survey method.

Table 3.3: Survey Method

<table>
<thead>
<tr>
<th>Survey Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Large distribution</em> – A large number of people can be targeted at the same time.</td>
<td><em>Costly</em> - Travel and accommodation costs can be prohibitive if interviews are scheduled in multiple locations. Job analyst labour costs can also be high with this method.</td>
<td></td>
</tr>
<tr>
<td><em>Difficult to develop</em> – Most surveys are self-directed, which necessitates that the questionnaire has explicit instructions, include appropriate demographic information, and ask questions to get the answers that are needed.</td>
<td><em>Difficult to compile</em> – For survey data to be collected and analysed manually, could be cumbersome process.</td>
<td></td>
</tr>
</tbody>
</table>
4. Developing a Curriculum (DACUM) – This method has been used since the early 1960s. It makes use of storyboarding and a structured group approach to draft the list of validated tasks and responsibilities with the assistance of a group of exemplars and managers. It is an eight-step process and the subject matter experts and middle and senior level managers are involved in the whole process. The task list is drafted in real time on the second or third day of the DACUM exercise and must be signed by all the parties involved in the analysis process. This facilitates a smoother completion of the review and approval processes, which allows training personnel to start much sooner with task analyses and content development (Hartley, 1999: 21). Table 3.4 shows the advantages and disadvantages of the DACUM method.

Table 3.4: DACUM Method

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasonably fast – Generally completed within three days.</td>
<td>Cumbersome – Storyboarding and listing of individual tasks on pieces of paper can become very tedious.</td>
</tr>
<tr>
<td>Self-validating – all the involved parties take part in the sessions at the same time, which makes it possible for the groups to cross-check each other.</td>
<td>Time consuming – It is possible for the groups to spend up to 25% of the job analysis session learning training and job analysis terminology prior to the actual job analysis session.</td>
</tr>
<tr>
<td>Proven methodology – This technique has been in use for more than thirty years.</td>
<td>DACUM certification is required – To legally conduct a DACUM session, the organisation must be certified to be a DACUM licensee by the Centre for Education and Training for Employees.</td>
</tr>
<tr>
<td>Ownership-instilled – Job incumbents and managers are faced with a situation where</td>
<td></td>
</tr>
</tbody>
</table>

Source: Hartley (1999:16)
they create their own organisation’s task and responsibility list to be used for training and own development.

Source: Hartley (1999:21)

5. Observations – With this method, job incumbents are observed in their work environment. The observer takes note of tasks performed, the steps of major tasks, tools and equipment used, communication processes, procedures and references used, interaction with other personnel and administrative activities. The observer can also ask questions of those personnel being observed. Table 3.5 shows the advantages and disadvantages of the Observation method.

Table 3.5: Observation Method

<table>
<thead>
<tr>
<th>Observation Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal for gathering information on manual tasks. – Especially positions where repetitive work is conducted eg. On the shop floors.</td>
<td>Can be slow. - The logistics and time to conduct a series of observations can be very time consuming.</td>
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<td></td>
<td>The right personnel must be chosen for observation – Job incumbents who are completing tasks incorrectly can lead to incorrect conclusions from the observer.</td>
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</tr>
<tr>
<td></td>
<td>Inefficient method – It may require multiple visits and observations to develop an appropriate task list, and several people will have to be involved.</td>
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<tr>
<td></td>
<td>Can be costly – Travel and accommodation costs can be prohibitive if interviews or observations are scheduled in multiple locations. Job analyst labour costs can also be high with this method.</td>
<td></td>
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<tr>
<td></td>
<td>Difficult to use for “knowledge workers” – Many people do not perform manual tasks in their jobs,</td>
<td></td>
</tr>
</tbody>
</table>
6. Procedural review – It is possible to gather large amounts of information about a person’s job by reviewing the work and administrative procedures associated with that position. The analyst can get groupings of tasks and task statements right from the procedures that he or she is reviewing. A major disadvantage of this method, however, is that many current positions do not have well documented procedures in place. The above mentioned methods are generally tedious and cumbersome.

One of the latest methods is:

7. Job analysis at the speed of reality (JASR)

This method is a tested process that makes it possible for analysts to complete an average job analysis within two to three hours and then to deliver a validated list of tasks and responsibilities for a position (Hartley 1999: 11). In the DACUM process, it is possible for the facilitator to spend up to 25% of the time orienting participants, explaining the process and defining training terminology such as job and duty areas. Most job incumbents can readily explain what they do and what is expected of them in their jobs without fully understanding what a duty area or functional area is. Furthermore, the DACUM and other related job analysis methods recommend the use of storyboards to complete some of the steps in the process. Each task statement must be written on a 216mm by 279mm piece of paper and posted on the wall near its corresponding duty area. The task statements are then revised and replaced, which can lead to a considerable amount of time being used. The JASR facilitator is more efficient, since it transfers information to a flip chart and uses different colours and symbols to manipulate the information on one page. Collaboration and software tools make it possible to facilitate sessions in real time with people in multiple physical locations over networks and the Internet. By making use of these tools and facilities, the facilitator can set up a teleconference with multiple representatives in multiple locations, while simultaneously displaying appropriate slides and posing questions. After such a session, the various representatives can return to work without incurring the costs associated with lost work time or travel costs to attend the sessions at a
central location. To summarise, the JASR method for job analysis is a reliable; proven method to create validated task lists in a short space of time. The end product is the basis for many potential training and staffing interventions.

3.2.1.2 Job design

Carrell et al (1998: 109) believe that job design determines how work is performed. To a large extent this affects how an employee perceives a job, how much authority an employee has over the work that is done, the degree of decision-making in the job environment and how many tasks the employee should complete. Managers are aware that job design determines both their working relationships with their employees and the relationships among the employees themselves. When looking at the previous industrial paradigm, success was based on efficiency and economies of scale. Furthermore, companies were organised by function, such as sales manufacturing, finance, purchasing, etc. Work was broken down into simple repetitive tasks that were executed in a specific sequence. Creativity and flexibility were not very prominent. The latest methods focus on the quality of customer service and satisfaction. Suppliers and customers have much closer relationships. Employees are empowered to a degree where they could make decisions previously reserved for supervisors and managers (Carrell et al, 1998: 104). Carrell et al (1998: 104) thus implies that an employee’s favourable reaction to job design means greater accomplishment, greater job satisfaction, a decline in absenteeism and fewer staff turnovers.

According to Hannagan (1995: 358), research has shown that job design may influence motivation, behaviour, productivity and job satisfaction to a large extent. He mentions two traditional ways in which jobs are re-designed to stimulate workers, namely, job rotation and job enlargement. Hannagan (1995: 358) argues that both job enlargement and job rotation are inadequate due to the fact that they are mostly implemented horizontally within the same organisational levels. Combining two monotonous and boring tasks, or rotating staff between them will not be satisfying or motivating. To overcome this problem, job enrichment was tried. Responsibility and a certain element of authority were added, by vertically expanding
the scope of the task through the organisational levels. Table 3.6 shows *the two main approaches to job design*.

<table>
<thead>
<tr>
<th>Specialisation-intensive jobs</th>
<th>Motivation-intensive jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Job simplification / job specialisation.</td>
<td>• Job rotation</td>
</tr>
<tr>
<td></td>
<td>• Job enlargement</td>
</tr>
<tr>
<td></td>
<td>• Job enrichment</td>
</tr>
<tr>
<td></td>
<td>• Work teams</td>
</tr>
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</table>


Carrell et al (1998: 110) mention two main approaches to job design:

1. **Specialisation-intensive jobs** – Jobs that have very few tasks, are repeated often during the work day and require few skills and little mental ability.

2. **Motivation-intensive jobs** – this approach represents a wide variety of methods for rearranging work in a way that creates enough interest to motivate employees, yet are simple enough for the majority of the members perform well.

- **Key job characteristics**

According to Hellriegel et al (2001: 271), key job characteristics are objective focus points of the job design that can be altered to improve job satisfaction and job performance. Some characteristics include

1. **Skill variety** – The various work activities together with the skills and talents required to perform a specific task.

2. **Task identity** – Present when a job has an identifiable beginning and end.

3. **Task significance** – Present when a job has a substantial impact on the goals or work of other employees in the company.
4. Autonomy – Present when the job provides substantial freedom, independence and discretion to the individual employee where scheduling and determining the procedures to be used in completing a specific task is concerned.

5. Feedback – Present when work results are communicated to the employee in such a way that it gives clear information about the employee’s performance of the task.

Hannagan (1995: 359) explains the five job characteristics that to a large extent, determine the attitudes and behaviour of employees as follows:

1. Skills verity - The degree to which a job provides for the use for a number of different activities and skills.

2. Task identity - The degree to which people complete a whole piece of work, rather than part of it.

3. Task significance - The extent to which a job exerts a substantial influence on the lives or work of others.

4. Autonomy - The extent of freedom and independence a job holder has to make his or her own decisions.

5. Feedback - The extent to which the job itself provides feedback about the job holder’s ongoing performance.

- **Job simplification**

This involves the scientific analyses of jobs performed by employees with the intention of streamlining the various work steps to achieve maximum output for minimum input. The objective of the job specification is to stipulate the various tasks for a specific job, the methods to be used and the workflow to be obtained. Many fast-food restaurants, such as McDonald’s, make use of job simplification for three reasons:

1. Employees are able to learn tasks in a short space of time.

2. Short work cycles allow task performance with little or no mental challenges.

3. Low-skilled and low-paid employees are hired and training is not very difficult.
The disadvantage of job simplification is that it usually leads to low employee commitment and a high staff turnover.

- **Job Rotation**

  According to Hannagan (1995: 358), job rotation occurs when workers are shifted between workstations at regular intervals to increase task verity. Gibson et al (1988: 474) define job rotation as “The practice of moving individuals from job to job to reduce their potential boredom and to increase their potential motivation.” By doing this, the worker is expected to complete various tasks, since each job usually consists of more than one activity. Carrell et al (1998: 114) explain that this technique is used to improve employee motivation and job satisfaction. This is done by moving employees between several jobs. This prevents employees from getting bored because of monotonous work. The negative side of job rotation is that although it covers the problem of assigning employees to jobs of limited scope, the extent of completion or the depth of the job stays the same. Although it is not much liked by employees due to the fact that they are only moved from one monotonous job to the next, it gives managers a means of coping with frequent absenteeism and high turnover, because employees are able to do one another’s work. It is also used as a training tool for new employees. According to Gibson et al (1988: 474), critics believe that job rotation involves having people perform several boring and monotonous jobs instead of only one.

- **Job Enlargement**

  This is used to increase employee satisfaction when they are doing routine jobs (Carrell et al, 1998: 113). Job enlargement mainly involves the increase of the job scope by increasing the number of tasks that are performed. It does this by eliminating the short cycle jobs that create boredom. Hannagan (1995: 358) explains that job enlargement is achieved when jobs are combined to give workers the opportunity to utilise a wider range of skills. Gibson et al (1988: 475) define job enlargement as follows: “The practice of increasing the number of tasks for which an individual is responsible.”
Gibson et al (1988: 475) add that job enlargement increases job range to reduce monotony and increase motivation. Gibson et al (1988: 475) also note potential obstacles, which include the following:

1. Not all employees can cope with enlarged jobs due to their complexity;
2. Employees with insufficient attention spans may not be able to stay with and complete an enlarged set of tasks;
3. Employees could demand higher salaries to accommodate the additional workload.

- **Job Enrichment**

Hellriegel et al (2001: 271) advise that job enrichment occurs when the job specification is modified to provide a bigger challenge to the employee by expanding the job tasks and responsibility to increase productivity. According to Hellriegel et al (2001: 271), job enrichment consists of four aspects:

1. It changes the relationship between employees and their work by expanding the area of responsibility.
2. It directly changes employee behaviours in ways that gradually lead to more positive attitudes towards the organisation, a higher morale amongst employees and an improved self-image. The reason is that job enrichment usually enhances feelings of autonomy and personal freedom in the work environment.
3. It sets the course for other organisational changes in the sense that it offers opportunities for developing teamwork and communication competencies by initiating interpersonal problems between managers and subordinates or among co-workers because of changes to the ways in which they interact.
4. It can enhance the human factor within an organisation. Individuals can experience the psychological lift that comes from developing new competencies and from a job well done.

Carrell et al (1998: 114) add to Hellriegel et al’s statement by mentioning that organisations that employ people with potential high levels of knowledge and skills should consider involving them in job enrichment programmes. The reason is that job enrichment presents a wider scope to the job. The main purpose is to make the job more exiting and challenging to
the employee. This is done by adding more tasks to increase variation and by giving the employee the opportunity to see the process through from start to finish. Proper job enrichment requires a great deal of commitment and planning from top management, retraining of employees and reasonable changes in leadership styles from supervisors and managers.

Gibson et al (1988: 476) add that the implementation of job enrichment is experienced through changes in job depth. Managers can provide employees with the opportunity to grow through job enrichment by making the following changes:

1. Direct feedback – Performance evaluation should be done timely and directly.
2. New learning – All jobs should provide the opportunity to learn.
3. Scheduling – Employees should be able to schedule their work to a certain extent.
4. Uniqueness – Each job should contain some unique qualities or features.
5. Control over resources – Employees should have some control over their job tasks.
6. Personal accountability – Individuals should be given the chance to be accountable for their own jobs.

Gibson et al (1988: 476) note that the process of job enrichment, firstly encourages employees to manage their own jobs and secondly, it redesigns the job to make such behaviour possible. To reach these goals managers should encourage employees to participate in decision making, set their own goals and evaluate their own and group performance.

Carrell et al (1998: 114) point out that labour leaders are not very prone to job enrichment programmes due to managers who have used these programmes to increase output standards, or to decrease the number of employees by increasing the work that each employee has to perform.

- Combined Approach (The Job Characteristic model)

Gibson et al (1988: 478) maintain that job enlargement and job enrichment are not competing strategies and that a new approach to job redesign is to integrate the two approaches. The
combined approach is known as the job characteristic model. The model addresses the interrelationships among the following areas:

1. Certain job characteristics;
2. Psychological states associated with motivation, satisfaction, and performance;
3. Job outcomes; and
4. Growth-needs strength.

Figure 3.2 illustrates the relationships between the four areas mentioned above.

Figure 3.2: The Job Characteristics Model

Source: Gibson et al (1988: 478)

Management can take certain steps to increase the core dimensions of the job, which include combining task elements, assigning whole pieces of work, allowing discretion in selection of
work methods, permitting self-paced control and opening feedback channels. These actions increase task variety, identity and significance; consequently they increase the psychological state or experienced meaningfulness of work. Permitting employee participation and self-evaluation and creating autonomous work groups increases the feedback and autonomy dimensions along with the psychological states of experienced responsibility and knowledge of actual results.

According to Gibson et al (1988: 478), the extent of the benefits of these redesign processes are moderated by the individual differences in employees’ growth needs. Employees with a strong need for accomplishment, learning and challenge respond more positively compared with those with relatively weak growth needs. For this reason, it is better to make use of employees who have a high need for self-esteem and self-actualisation in this type of job redesign, as employees with low growth needs may experience stress, anxiety, adjustment problems and absenteeism.

- **Work Teams**

Carrell et al (1998: 114) believe that work teams facilitate another form of job enrichment by providing the opportunity of also satisfying the individual’s social needs. One of the main objectives is for the team to reach a stage where the team is empowered to manage itself and the work is done by the individual members. Responsibilities include controlling schedules, dividing up tasks, learning multiple tasks and training one another (Gibson et al 1988: 478). At this level, teams are referred to as *self-managed work teams* or *autonomous work groups*. It may be necessary for members to perform numerous tasks for the team; this is termed multi-skilling. Internationally, work teams are primarily being used in industry as motivational tools, to improve productivity and quality while lowering costs. The members of these work teams are usually more committed to their work because they have a sense of ownership. According to Carrell et al (1998: 115), there are two stumbling blocks that could hinder proper multi-skilling, rigid job classification systems and union resistance. These may be overcome by doing proper planning and by management being transparent and honest about their intentions for the various groups. Nelson and Campbell Quick (1997: 261) mention that teams are task-
orientated work groups that are able to perform complicated tasks though a combined effort. By forming teams, individual limitations are overcome through collaboration.

3.2.1.3 Perceived job content
Gibson et al (1988: 468) believe that perceived job content refers to characteristics of a job that define its general nature as perceived by the jobholder and recommend that a time and motion study should be done to establish the standard time to complete a task and the “best way” to do the task. The motion study will highlight the preferred work activities with respect to raw materials, product design, order of work, tools, equipment and workplace layout, whereas the time study would indicate the required time in which the assessed activities should be performed. Furthermore, employees are individuals with different backgrounds, needs and motivations, which leads them to perceive jobs differently. It is thus critical for a manager to distinguish between the objective and the subjective properties of jobs as reflected in the perceptions of the people who perform them. Two additionally important thing to consider are individual differences such as personality, needs and span of attention, and the social settings in which the job is performed.

3.2.1.4 Job performance:
Gibson et al (1988:471) maintain that performance outcomes have value to both the individual and the organisation.

- **Objective outcomes**
Gibson et al (1988: 471) advise that quantity and quality of output, absenteeism, tardiness and turnover are objective outcomes, which can be measured in quantifiable terms. For example industrial engineering standards specify daily quality and quantity control and customer specifications that set the required quality targets. These aspects of job performance account for the requirements of the product, client, or service that the jobholder is responsible for.
• **Personal Behaviour Outcomes**

The employee has two options to choose from, either attending work regularly or being absent. Other circumstances that could influence these two decisions are physiological or health difficulties that could influence the job performance. Excessive stress in the work environment could also effect performance adversely.

• **Intrinsic and Extrinsic Outcomes**

Gibson et al (1988: 472) recommend that it is important to distinguish between intrinsic and extrinsic outcomes to understand the reactions of employees to their jobs. Intrinsic outcomes are related to the employee’s action. These outcomes involve feelings of responsibility, challenge and recognition which in turn result from job characteristics that include variety, autonomy, identity and significance.

Extrinsic outcomes on the other hand, are events that are succeeded by the employee’s own efforts in conjunction with factors indirectly related to the job which include pay, working conditions, co-workers and supervision (Gibson et al 1988: 472)

• **Job Satisfaction Outcome**

Gibson et al (1988: 473) emphasise that the level of job satisfaction is directly related to the intrinsic and extrinsic outcomes and the way they are viewed by the employee. For certain people, responsibility and challenging work may have negative or neutral effects. For other employees these work outcomes may be uplifting and highly motivational. These differences are related to the way that people perceive their job outcomes and account for the various levels of job satisfaction experienced by people doing similar tasks.
3.2.2 Flexible job designs

Some organisations have adopted alternative work schedule options to accommodate their employees as a means of improving employee motivation, productivity and job satisfaction (Robbins, 1998: 537). Some of the work redesign includes compressed workweeks, flextime, job sharing and telecommuting.

3.2.2.1 Telecommuting

Ivancevich and Matteson (1996: 256) describe telecommuting as working from home while being linked to the office by means of computer, fax machine and/or telephone. This type of alternative job design allows freedom of location as well as a degree of flexible scheduling. Advantages include increased productivity and improved employee morale due to minimum time constraints related to travelling to work and back, reduced freeway congestion and more free time to the employee. Other benefits according to Robbins (1998: 540), include no commuting, flexible hours, freedom to dress as you please and little or no interruptions from colleagues. Robbins (1998: 540) suggests that telecommuting is currently one of the fastest growing trends in work scheduling. Disadvantages include complaints from workers that they were not involved in some of the important meetings or information sharing sessions that led to new policies and ideas, and non-work-related distractions such as children, neighbours and television.

3.2.2.2 Flexitime
Ivancevich et al (1997: 253) define flexitime as a schedule that allows workers to choose their starting and quitting times within limits set by management. The number of work hours remains the same, but the employee decides when the workday starts and ends. By doing this the employee can, for example, work ten hours the one day and only six hours the next. Work areas where flexitime is used include lab technicians, nurses, data entry clerks and engineers. According to Ivancevich et al (1997: 253), flexitime has had the following positive effects on organisations in which it had been implemented:

- Increased productivity,
- Lowered labour costs,
- Higher morale,
- Reduced paid absence,
- Reduced idle time,
- Reduced cost incurred due to overtime and
- Built loyalty.

Berry (1998: 482) mentions the following areas of improvement:

- Reduces in absenteeism,
- Allows employees to commit to personal appointments such as medical, shopping and attending children’s school functions.

However, Berry (1998: 482) adds that research has shown that flexitime has not really improved performance on the job. Ivancevich et al (1997: 253) have the following negative remarks regarding flexitime:

- It cannot be used effectively throughout all the departments in the organisation, for example, production units with assembly lines and multiple shifts and jobs / services that have to be covered continuously, for example, bus drivers and retail sales clerks.
• To accommodate the longer / unusual working hours, additional costs would be incurred for heating and cooling office buildings.

• It may not be possible to co-ordinate supervisor and subordinate work schedules, which may result in partial lack of supervision, and this may, in turn, give some employees the wrong impression and lead them to abuse the flexible schedule.

From the above statements it is clear that for an organisation to follow the flexitime route it must be planned correctly and implemented properly.

3.2.2.3 Compressed work weeks

Robbins (1998: 537) advises that the most popular choice of a compressed work week is in the form of a four, ten-hour day. The advantage to the employee comes in the form of more leisure and shopping time and travelling to and from work at non-rush-hour times. This leads to an increase in employee enthusiasm, morale and commitment to the organisation; an increase in productivity and reduced costs; reduced machine downtime in manufacturing; reduced overtime, turnover and absenteeism; and ease of employee recruitment. Benefits include a positive effect on productivity where work processes require lengthy start-up and shut down periods because productivity standards take these periods into consideration when determining the time required to generate a given output. In this case the improved work schedule reduces non-productive time. Disadvantages include employees who complain about fatigue near the end of the day and about the difficulty of co-ordinating their jobs with their personal lives.

3.2.2.4 Job Sharing:

Robbins (1998: 540) states that job sharing allows two or more employees to split a traditional 40-hour-a-week job. An example that is given involves one person who performs a job from 8am to noon, where after another performs the task from 1pm. to 5pm.; or two could work a full day, but alternate days. Job sharing is less popular than flextime, because only approximately 30% of large organisations allow this option. An additional benefit to the organisation
is that job sharing allows the organisation to make use of the talents of more than one individual in a given job. For the employee, this approach allows greater flexibility.

3.3 APPROACHES TO ORGANISATIONAL STRUCTURES

Gibson et al (1988: 427) point out that the statement that organisational structures facilitate the achievement of organisational goals assumes that managers know how to match organisational structures and goals. This statement may be incorrect in many cases because managers are unable through training or intellect to design a structure that guides the behaviour of individuals and groups to achieve high levels of production, efficiency, satisfaction and development. According to Banner and Gagne (1995: 205), organisations must consider matrix or organic structures which are flexible when operating in complex, interdependent and turbulent organisational environments. Callahan et al (1986: 314) emphasise that both the direction and the intensity of organisational change will alter the structural design of those organisations involved.

McLagan and Nel (1995: 20) believe that organisations should find ways of identifying and meeting the needs and demands of a diverse customer base by means of continuous innovation and the anticipation of future customer requirements. For organisations to fulfil these needs, they must have the required organisational design to suit these needs. Ivancevich et al (1997: 212) agree with McLagan and Nel when they state that quality and competitiveness are two of the most important factors that determine success in today’s global
environment. To achieve this organisations must be designed in such a way to enable employees to be committed to quality and to satisfy their customers in the process.

Organisations are purposeful and goal orientated and management should consider those structures that contribute to organisational effectiveness by facilitating the achievement of organisational goals in a highly competitive environment (Gibson et al, 1988: 428).

3.3.1 Definitions of organisational structures

Gibson et al (1988: 428) define an organisational structure as follows: “A relatively stable framework of jobs and departments that influence the behaviour of individuals and groups toward organisational goals.”

Banner and Gagne (1995: 131) states that an organisational structure evolves due to changes that occur in technology, power, strategy, environment and size. Punnett and Ricks (1997: 419) point out that the structure of an organisation is of cardinal importance to the organisation’s ability to achieve its goals effectively, thus providing a framework for the control of the firm. It is also important to consider the purpose of the organisation when an appropriate structure is chosen.

Ivancevich et al (1997: 212) define the organisational structure as the means of structuring both human and physical resources to maintain the organisational goals. This is done by assigning responsibilities, delegating authority,
determining appropriate departments based on the type of work done and ultimately deciding on the span of control. Gibson et al (1988: 340) note that the organisational structure is the control mechanism by which the organisation is governed.

Mullins (2002: 530), gives the following definition for an organisational structure: “Structure is the pattern of relationships among positions in the organisation and among members of the organisation. Structure makes possible the application of the process of management and creates a framework of order and command through which the activities of the organisation can be planned, organised, directed and controlled.”

3.3.2 Deciding on the organisational structure

Mullins (2002: 536) believes that the objectives of the organisation must clearly state the basis for the division of work and grouping of duties into sub-units. The nature of the organisation and its strategy will determine the organisational levels best suited for the different functions and activities and the relationship between them. The established objectives will assist in developing of the communication channels between the various parts of the organisation and the degree of decentralisation and delegation. Furthermore, the division of work and the grouping of people for specific tasks and work areas should be according to some common characteristic which forms a logical link between the activities that are involved. Ivancevich et al (1997: 214) explain that the managers who are responsible for the design of the organisational structure, have to consider the following four main areas:

- Specialisation of jobs (high – low)
- Delegation of authority (centralised – decentralised)
- Departmentalisation (homogeneous – heterogeneous)
- Span of control (narrow – wide)
3.3.2.1 Specialisation of jobs

The extent to which jobs are specialised is a critical managerial decision because jobs vary considerably when it comes to the area of specialisation. The degree of specialisation could actually alter the organisational structure. 

*Scientific Management versus Craftsmanship* – Scientific Management, according to Ivancevich et al (1997: 215), involved unskilled, illiterate immigrants in the early 1900s, which required that tasks be broken down to the most basic form. Furthermore, problem solving was elevated to management level. Through time and motion studies, the most basic steps were identified, which caused effort to be minimised and led to output being maximised. Presently, specialisation has even moved across to jobs such as airline pilots, nurses and accountants, where the employees study a job routine and then repeat the tasks. In contrast with craftsmanship, the employee was entirely responsible for his own work and management only provided the means and facilities for the craftsman to perform the complete operation. Craftsmanship results in high-quality products but is expensive and yields low output. According to Ivancevich et al (1997: 215), the invention of the assembly line destroyed craftsmanship and gave way to scientific management and greater specialisation. Table 3.7 shows the difference between scientific management versus craftsmanship.
Table 3.7: Scientific Management versus Craftsmanship

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<thead>
<tr>
<th></th>
<th>Scientific Management</th>
<th>Craftsmanship</th>
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<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td>High productivity</td>
<td>High skilled</td>
</tr>
<tr>
<td></td>
<td>Lower cost</td>
<td>High-quality output</td>
</tr>
<tr>
<td></td>
<td>Higher wages</td>
<td>Pride in work</td>
</tr>
<tr>
<td></td>
<td>Unskilled workers</td>
<td>High job interest</td>
</tr>
<tr>
<td></td>
<td>Predictable scheduling</td>
<td>Control by employee</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td>Low morale and boredom</td>
<td>Low productivity</td>
</tr>
<tr>
<td></td>
<td>Poor quality</td>
<td>Higher cost</td>
</tr>
<tr>
<td></td>
<td>Lack of pride</td>
<td>Lower wages</td>
</tr>
<tr>
<td></td>
<td>Low job interest</td>
<td>Poor control</td>
</tr>
<tr>
<td></td>
<td>Control by managers</td>
<td>Scheduling problems</td>
</tr>
</tbody>
</table>


*Teams and Quality Circles* – Ivancevich et al (1997: 216) remark that the Japanese were the first to realise that a scientific management approach is only efficient in expanding markets. Due to the monotonous approach of scientific management, the Japanese were experiencing high absenteeism, low morale and poor-quality output. To overcome this obstacle, Japan focused more on the quality of their products, which made it possible for them to penetrate various markets. This showed that the degree of specialisation must be carefully considered to prevent the work environment from becoming demotivating and demoralising.
According to Ivancevich et al (1997: 216), the team-approach is being considered by more and more organisations. A work team is a group of employees who work closely together to pursue common goals. Teams have the ability to gain innovative ground and to solve complicated problems due to the “many minds are better than one” approach and the possible cross-functional nature of the group. Quality circles are based on the principle that the employees who are involved in a specific process are the most qualified to identify, analyse and correct the problems in any given situation. Ivancevich et al (1997: 216) define a quality circle as a small group of people (five to eight) who are involved in the same type of work, who meet approximately once a week to share experiences, identify problems and present possible solutions. Participation in the circle is voluntary and the members of the team choose a moderator or team leader to lead discussions. Furthermore, the team’s findings and proposals are forwarded to management.

3.3.2.2 Delegation of Authority

Ivancevich et al (1997: 216) state that management must consider the extent to which authority will be distributed throughout the company when the organisational structure is designed. Ivancevich et al (1997: 216), mention that decentralisation is the process of distributing authority throughout the organisation and centralisation is the process of retaining authority by high-level managers who make all the decisions.

Advantages of decentralisation include the following:

1. Managers develop their own decision-making skills and are motivated to perform because advancement is related to performance.
2. Motivation contributes to the organisation’s profitability by improving productivity.

Disadvantages of decentralisation are as follows:

1. It requires expensive management training programmes.
2. Delegation leads to extensive planning and reporting procedures.
3. Some managers find it difficult to make decisions.

4. Organisations may experience an overlap of functions due to a lack of co-ordination. Further investigation revealed that many large, successful companies adopt both centralised and decentralised structures. Authority is delegated all the way to the shop floor, yet certain decisions that are deemed critical to the organisation’s core value are centralised. This points to the coexistence of clear, centralised direction with adequate individual autonomy.

- **Empowerment** – Ivancevich et al (1997: 218) define empowerment as follows: “Giving employees who are responsible for hands-on production or service activities the authority to make decisions or take action without prior approval.” Examples include a machine operator who can stop production if a problem is detected without calling the supervisor. Production, process control and quality assessment become part of everyone’s job and all individuals are given the ability and authority to take positive action that will result in high quality and performance. Empowerment of employees aims to build a work environment that motivates employees from within through intrinsic incentives such as pride in workmanship. Empowerment is essential if employees are expected to make a total commitment to continuous quality improvement. Educating employees is critical to a successful empowerment strategy.

- **Chain of command** – Delegation of authority creates a **chain of command**, according to Ivancevich et al (1997: 220). This is the formal command that defines the lines of authority throughout the organisation and is thus the communication link among all the positions in the organisation.

- **Line and staff positions** – The chain of command includes both line and staff positions (Ivancevich et al, 1997: 218). **Line position** is the direct chain of command, which contributes directly to achieving the organisational goals. **Staff positions** facilitate or provide the line positions with information or advice, thus acting as a support function. Figure 3.3 illustrates the difference between line and staff positions.
3.3.2.3 Departmentalisation

Ivancevich et al (1997: 221) explain that departmentalisation occurs when jobs are grouped according to similarity. It becomes more difficult to define the grouping boundaries as the organisation grows in size and as job specialisation increases. The departmentalisation boundaries are usually set on the bases of function, product, customer and geography. According to Gibson et al (1994: 480), a disadvantage of departmentalisation, is that the organisational goals may become less important than the departmental goals.

- **Functional Departmentalisation** – With functional departmentalisation, jobs are grouped according to the various functions of the organisation. Examples of functions are production, finance, human resources, marketing and logistics. The aim and main benefit of functional departmentalisation is to group experts in a particular field. DuBrin (1997:
suggests that functional departmentalisation occurs when people are grouped according to their expertise. Ivancevich et al (1997: 221) point out that it is advisable to make use of functional departmentalisation when the organisational environment is stable and its processes and operations are under tight control.

- **Product Departmentalisation** – Here jobs that are associated with a particular product or product-line are grouped together (Ivancevich et al, 1997: 221). By doing this, people who are knowledgeable about a specific product could combine their efforts and expertise to the company’s benefit. Product departmentalisation also provides the flexibility to develop customised strategies for various product lines. However, this type of grouping requires a manager for each product, which can become very costly and also leaves the possibility of duplicating efforts among divisions. Gibson et al (1994: 482) point out that product-based organisations promote initiative and autonomy by making important information and resources available to achieve company objectives. The negative side is that a certain degree of redundancy may occur due to the overlapping of functions between the various departments. DuBrin (1997: 218) explains that product-service departmentalisation is the arrangement of departments based on the products or services that they provide.

- **Customer Departmentalisation** – Jobs are grouped according to customer needs. DuBrin (1997: 218) defines customer departmentalisation as those structures that are created due to customer needs. This method is primarily used by organisations with large customers or that serve diverse customer
groups. This type of departmentalisation could prove to be very costly if a large staff is required to integrate different departmental activities.

- **Geographic Departmentalisation** – According to Ivancevich et al, (1997: 222), this type of grouping is based on company defined territories. This design works well when an organisation has branches in various countries and its customers’ needs and characteristics vary to a large extent. It gives the organisation the ability to respond to unique customer requirements in a short space of time.

- **Alternative Forms of Departmentalisation** – Mixed departmentalisation occurs when the organisation makes use of more than one of the various forms of departmentalisation as the organisation evolves over time. An advantage is that people are given the opportunity to work together in multidisciplinary teams that encourage interaction. Ivancevich et al (1997: 223) note that certain organisations are moving away from departmentalisation to a processed based organisation, where performance objectives are based on meeting customer needs and identifying the processes that meet these needs.

### 3.3.2.4 Span of Control

The span of control, as explained by Ivancevich et al (1997: 225), signifies the number of people who report to one manager or supervisor. The aim is to find the correct ratio of employees to manager or supervisor. The larger the number of people who report to a manager or supervisor, the wider the span of control and visa versa. There is no formula to determine the ideal span of control; it mainly depends on the ability of the manager and the nature of the job being
supervised. Modern organisations are moving to a wider span of control with a flatter, more responsive structure where decisions can be made without consulting numerous levels of management. According to Ivancevich et al, (1997: 226) the following factors must be considered when deciding on the span of control:

- The competency level of both the manager and subordinates. – The higher the competency level, the wider the span of control.
- The extent of interaction that is required among the areas to be supervised. – The more the required interaction, the narrower the span of control.
- The number of non-managerial tasks that the manager has to do. – The more technical and job-related the work is that the manager has to perform, the less time is available for supervision, the narrower the span of control should be.
- The degree of similarity or dissimilarity of the jobs being supervised. – The bigger the similarity between the jobs, the wider the span of control.
- The number of standardised procedures that are available. – The more routine the subordinates’ jobs are and the more the jobs are being performed to standardised methods, the wider the span of control.
- The degree of dispersion between the manager and his subordinates. – If all the subordinates are located in one area and are within eyesight of the manager, the span of control can be wider, compared with that of a manager whose subordinates are dispersed throughout the plant.

3.3.3 Dimensions of organisational structures
Ivancevich et al (1997: 226) provide the following information regarding organisational structures.

- The organisational structure is determined by the selection of the four organisational design models as mentioned above (specialisation of jobs, delegation of authority, departmentalisation and span of control).

- The organisational structure plays a vital role in organisational performance.

- The organisational structure adds formalisation, centralisation and complexity to the organisation.

Banner and Gagne (1995: 91) maintain that organisational structures involve the following variable requirements:

- **Formalisation** – The extent to which policies, rules, regulations and procedures constrain work behaviour.

- **Centralisation** – The degree to which decision-making power is concentrated at the top level of management.

- **Complexity or differentiation** – The extent of horizontal, vertical and spatial complexity in the organisation. It also includes other structural attributes, for example, division of activities, allocation of responsibilities, communication flow and the span of control.

- **Organisational goals** – The ways in which the organisation plans to reach specific results.

- **Integration** – The method of co-ordinating and controlling organisational activities among the various employees.

3.3.3.1 Formalisation

Ivancevich et al (1997: 226), explain that formalisation is the extent to which the organisation has proper systems in place to indicate it is running. The generalisation is made that organisations which make use of high
specialisation, little delegation of authority, functional departments and narrow spans of control are more formalised than organisation that are characterised by the opposite. Scientific management is thus characterised as having a high degree of formalisation, whereas craftsmanship applies less formalisation. DuBrin (1997: 213) states that formalisation is the extent to which expectations regarding the methods of work are specified, committed to writing and enforced within the organisation.

3.3.3.2 Centralisation

Centralisation, as pointed out by Ivancevich et al, (1997: 226) is the extent to which the delegation of the authority to make decisions is dispersed throughout the organisation. In a highly centralised organisation, the top-level managers reserve decision-making authority. Centralisation, explained in terms of the four organisational structure criteria, has high specialisation, low delegation of authority, functional departments and narrow spans of control. DuBrin (1997: 213) has a similar definition for centralisation. He states that it is the degree to which executives delegate authority to lower organisational units.

3.3.3.3 Complexity

Ivancevich et al (1997: 221) define complexity as the degree to which jobs are divided to satisfy organisational needs. As organisations grow departments expand to cover the workload, which results in an increase in complexity. High complexity is thus a result of high specialisation, product departmentalisation, customer departmentalisation, geographic departmentalisation, high delegation of authority and narrow spans of control.
From the information above, it is clear that organisations vary in terms of their degree of formalisation, centralisation and complexity. These differences occur due to management’s decisions regarding the organisational structure. There is no single, perfect structure for an organisation. The purpose of the structure is to serve the organisational as well as employee needs in terms of organisational objectives and employee rewards and behaviour that would lead to quality work. Since the organisation is a living environment, it is vital that management must review the structure over time to bring the organisational objectives in line with both the internal and external environmental changes. Mullins (2002: 530) supports Ivancevich et al’s statement that it is necessary to have a formal organisational structure and for the continual review of the structure to ensure that it is the most efficient for the organisation. The structure must be in sync with the organisation’s growth and development.

### 3.3.4 Functions of organisational structures

Byars (1992: 154) provides the following functions of organisational structures:

- Determines how resources are allocated;
- Specifies where responsibilities for profits and other performance measures lie;
- Establishes the direction of the flow of information;
- Clearly outlines how decisions are made.

Gibson et al (1988: 340) agree with Byars and advise that the organisational structure determines the flow of information and the formal direction of communication. The organisational structure also outlines the positions of power and authority related to them. McFarland (1970: 368) maintains that management decides on a specific organisational
structure to fulfil certain functions, although it is not always possible to serve all the functions equally well. Therefore, it is important for management to keep the organisational structure in line with the changing needs and strategies of the organisation.

Mullins (2002: 530) outlines the objectives of an organisational structure as providing for the following:

- Optimising organisational performance, both economically and at the level of resource utilisation;
- Monitoring and facilitating the activities performed by the organisation;
- Stipulating accountability for the work done by all the employees of the organisation;
- Co-ordinating all the activities within the organisation;
- Being flexible enough to respond rapidly to future demands and developments caused by evolving environmental influences;
- Satisfying the social needs of the employees working for the organisation.

Ivancevich et al (1997: 213) believe that the organisational structure should be consistent with its strategy and indicate the line of authority, communication and responsibility throughout the organisation. Ivancevich et al (1997: 213) add that management purposely develops a structure that would enhance the organisation’s overall strategy by considering facts such as local and global competitors and the environment. Banner and Gagne (1995: 231) maintain that an organisational structure provides a framework for functions such as:

- the division of work among employees;
- guidelines for rules, regulations, policies and procedures;
- establishment of authority relationships;
- the linking together of the entire organisation by means of various co-ordination mechanisms.

### 3.3.5 The relation between the organisational strategy and the structure

Byars (1992: 154) reveals that in a groundbreaking study of organisational strategy that was done by Alfred D. Chandler on du Pont General Motors, Sears, Roebuck & Co., and Standard Oil Company it was found that the organisational structure must follow the strategy of the organisation. This means that a change in strategy usually leads to a change in organisational
structure. When two or more companies combine due to a merger or joint venture, or when an organisation acquires one or more companies, problems that are related to the current structure may arise. One of the reasons might be that companies consolidate to eliminate some positions to become an integrated, unified organisation.

### 3.3.6 Mechanistic structures verses Organic structures

Robins (1998: 497) states that the organisational structure is one of the aids that management uses to achieve their objectives. Therefore the structure should follow the strategy of the organisation. Most current strategy frameworks focus on three areas, namely, innovation, cost minimisation and imitation and the structural design that works best for each. According to Robins (1998: 497), there are two extreme models of organisational design, namely the **mechanistic model** and the **organic model**. Table 3.8 shows which structure to use for a specific strategy.

**Table 3.8: Structure to strategy relationship**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Structure option</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Innovation</td>
<td>Organic: A loose structure; low specialisation, low formalisation, decentralisation.</td>
</tr>
<tr>
<td>• Cost minimisation</td>
<td>Mechanistic: Tight control; extensive work specialisation, high formalisation, high centralisation.</td>
</tr>
<tr>
<td>• Imitation</td>
<td>Mechanistic and Organic: Mix of loose and tight properties; tight control over current activities and looser control for new undertakings.</td>
</tr>
</tbody>
</table>

Source: Robins (1998: 497)

Robins (1998: 499) maintains that the following areas play a role when choosing the appropriate organisational structure.

- **Size** of the organisation - Reasonably large organisations, typically employing more than 2000 people, make use of the mechanistic structure because it tends to have more specialisation, more departmentalisation, more vertical levels and more rules and regulations compared with smaller organisations.
• **Technology** is another area that determines the structure. If formalisation is high, routine technology can be accompanied by decentralisation, whereas non-routine technologies, which tend to rely more on the knowledge of specialists, are characterised by delegated decision authority.

• **Environment** also plays an important role during the choice of the organisational structure. The environment includes the following factors: suppliers, customers, competitors, government regulatory agencies and public pressure groups. It is especially the degree of uncertainty within the environment that influences the type of structure. When the environment is reasonably stable – no new competitors, no new technological discoveries by current competitors, or little activity by public pressure groups to influence the organisation – organisations usually choose the mechanistic structure due to its degree of routineness and departmentalisation. Other organisations experience dynamic environments – new competitors, difficulties in acquiring raw materials and continually changing product preferences by customers. These organisations make use of the organic structures, which allow flexibility to adjust to the rapidly changing environment. Figure 3.4 illustrates the differences between *Organic* and *Mechanistic* models.

---

**Figure 3.4: Mechanistic versus Organic models:**

**The Mechanistic Model**

![Mechanistic Model Diagram](source: Robins (1998: 497))
Table 3.9 shows the differences between Mechanistic versus Organic models.

### Table 3.9: Mechanistic versus Organic models

<table>
<thead>
<tr>
<th>The Mechanistic Model</th>
<th>The Organic Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>High specialisation</td>
<td>Cross-functional teams</td>
</tr>
<tr>
<td>Rigid departmentalisation</td>
<td>Cross-hierarchical teams</td>
</tr>
<tr>
<td>Clear chain of command</td>
<td>Free flow of information</td>
</tr>
<tr>
<td>Narrow spans of control</td>
<td>Wide spans of control</td>
</tr>
<tr>
<td>Centralisation</td>
<td>Decentralisation</td>
</tr>
<tr>
<td>High formalisation</td>
<td>Low formalisation</td>
</tr>
</tbody>
</table>

Source: Robins (1998: 497)

3.3.6.1 The Mechanistic Model

Robins (1998: 497) explains that this model is normally associated with the bureaucracy due to the fact that it has extensive departmentalisation, high formalisation, a limited information network (mostly downward communication) and little participation by low-level members in decision making. Ivancevich et al (1997: 226) point out that a bureaucratic organisation is
characterised as being rigid since it tries to achieve high production volumes and efficiency through rules, specialised jobs and centralised authority.

3.3.6.2 The Organic Model

According to Robins (1998: 498), this model looks very similar to the boundaryless organisation. This model is flat, uses cross-hierarchical and cross-functional teams, has low formalisation, possesses a comprehensive information network (utilising lateral and upward communication as well as downward) and also involves high participation in decision making. Ivancevich et al (1997: 229) believe that the organic structure attempts to maximise flexibility and adaptability to encourage greater utilisation of human potential. The organic model de-emphasises the specialisation of jobs, status and rank. With this type of organisation, horizontal and lateral relationships are equally as important as vertical relationships. Managers who make use of an organic structure encourage and motivate employees by providing them with a supportive work environment that facilitates a sense of personal worth and importance. This type of organisation is characterised as being decentralised: communication flows through all levels of the organisation rather than through the chain of command and departmentalisation is usually based on product and customer rather than on function.

3.3.8 Other organisational structures

3.3.8.1 The Matrix Organisation

Ivancevich et al (1997: 229), state that the matrix design attempts to utilise the strengths and reduce the weaknesses of both the mechanistic and organic designs. The matrix organisation is defined as:

“A cross-functional organisation overlay that creates multiple lines of authority and places people in teams to work on projects for a finite period of time.”

Functional departments is the foundation, and a number of products or temporary departments are superimposed across the functional departments, which are displayed as a command. Figure 3.5 is a typical illustration of a matrix structure.

--- Line authority exercised over departmental staff through direct chain of command.
----- Project authority exercised over selected staff assigned from departments as appropriate.

Figure 3.5: The Matrix Organisation
Gibson et al (1994: 484) believe that the matrix structure facilitates the amplification of a horizontal structure of authority, influence and communication on the vertical structure. This arrangement is useful in speeding up innovation, as each person’s primary responsibility is to focus on a specific project. The key is to move away from bureaucratic constraints by empowering employees to create innovative ideas and products, while at the same time providing the structure to facilitate this. Ivancevich et al (1997: 230) mention the following advantages that are applicable to the matrix organisation:

- It is especially useful when co-ordination is required in complex and uncertain environments.
- It leads to the efficient use of a specialised employee base.
- It provides a timely response to a volatile environment.
- It enables technical specialists to interact with each other.
- It frees top-level management from routine activities to spend more time planning and coordinating.
- It encourages individual growth and development.
- It provides flexibility and adaptability. Organisations that make use of teams and quality circles often adopt the matrix model.

Disadvantages of the matrix organisation:

- It creates a lot of red tape, numerous committees and can end up in a reasonable bureaucracy.
- It can create confusion because individuals or groups report to more than one superior.
- Several managers may end up placing conflicting demands on their subordinates or struggle with each other for power, placing the workers in a compromising position.
- In some cases, it was found that groups take longer to make decisions than individuals.
- The matrix structure could be costly because additional managers and staff may be required.

3.3.8.2 The Multidivisional (M-Form) Organisation
This form of organisation, according to Ivancevich et al (1997: 231), has developed in Western Europe and in the United States during the past 50 years. It consists of a high-performance organisation whose operating units or divisions are partially independent. Each division has its own unique product, but areas such as technology, skill and information are shared. This design tries to facilitate a balance: autonomy among the divisions and control over them. It emphasises the balance between dependency of the organisation and interdependency between divisions. If the organisation as a whole had to react to the various changes in the competitive environment, it would be too slow, however with the M-Form, each division can operate independently to maximise profits and react timeously to change. The key is to ensure that co-operation between divisions does not restrain the creativity and performance of divisions and eventually the organisation. Figure 3.6 is an example of a multidivisional organisation.


**Figure 3.6: The Multidivisional (M-Form) Organisation**
3.3.8.3 The Network Organisation

Ivancevich et al (1997: 231) describe a network organisation as a flexible, sometimes temporary, relationship between manufacturers, buyers, suppliers and even customers. The design is dynamic in nature, as major components can be assembled and reassembled to meet changing competitive conditions. A major advantage of a network organisation is that members can focus on the activities that they perform best. Members are held together by contracts and common goals. Ivancevich et al (1997: 231) add that a temporary network of independent organisations, linked together by information technology, that get together for a short space of time to exploit rapid changing opportunities are called virtual organisations. A virtual organisation does not make use of an organisational chart because it consists of partnerships that are usually dissolved once a goal is achieved. In the same manner, a modular corporation consists of a centre surrounded by a network of the best suppliers in specific areas. The hub or centre is usually made up of activities such as research and development, whereas the network consists of external specialists who manufacture the components, handle deliveries and perform accounting activities. DuBrin (1997: 222) defines a virtual organisation as follows:

“It is the temporary association of otherwise independent companies that are linked by technology to share expenses, employee expertise and access to each other’s markets.”

Ivancevich et al (1997: 232) explain that some organisations call this type of structure, the “spider web”, because the organisation is the centre, which in turn is connected to various members, with each member performing a specialised function all interconnected. Each member has the opportunity to make use of the organisation’s collective knowledge and expertise via the spider web. A "Shamrock" is another name to describe an organisation that is based around a core of essential executives and workers supported by external contractors. According to Mullins (2002: 580), the three “leaves” to each stem represent the professional core; the contractual fringe and the flexible labour force.

3.3.8.4 Work Teams

Nelson and Campbell Quick (1997: 252) define a team as "A small number of people with complementary skills who are committed to a common mission, performance goals and
approach for which they hold themselves mutually accountable.” Greenberg and Baron (1997: 270) describe a team as being a group of people whose members have complimentary skills and have a common vision and goals. Greenberg and Baron (1997: 272) explain that there are various types of teams that are used by organisations.

- **Work teams** – These teams are mainly involved with development and manufacturing of products, providing services to customers and using the organisation’s resources to effectively create results for the company.

- **Improvement teams** - Greenberg and Baron (1997: 272) maintain that these teams are responsible for improving the processes that are used by the organisation.

- **Self-managed work teams** – These are teams whose members are in a position to make key decisions about how their work is done.

- **Cross-functional teams** – These teams consist of members from the various areas of the organisation who work together on a specific task.

### 3.3.8.5 The Complete Organisation

Ivancevich et al (1997: 231) believe that the organisation of the future will be lean, flexible, responsive and highly competitive. When combined, these factors define the completeness of the organisation as follows:

- The organisation’s policy is drafted by management with the consent of the shareholders.
- Requirements are stated in a manner understood by everyone.
- All employees have access to training and the ability to acquire new skills.
- Performance measurement is based on a culture of consideration.
- One of the organisation’s main goals is to give employees the ability and assistance to be successful in every aspect of their lives.

Ivancevich et al (1997: 231) state that complete organisations are responsive structures that are committed to quality. The “spiral” model integrates many concepts, practices and philosophies of quality management that include flexibility, completeness and empowerment. The spiral signifies that quality is continuous throughout the organisation. From the centre of the spiral emerges the guiding vision of the organisation from which follows the foundational principles of culture, leadership, planning and change management.
4.1 INTRODUCTION

The objective focus of this chapter is to establish an appropriate research strategy for a given research problem. A research strategy must be applicable to the nature of the problem.

The assumption is made that the nature of the research problem and the objectives and methodology of the research will focus the research strategy towards triangulation with the
primary research methodology focused on quantitative research and the secondary research on qualitative research.

4.2 WHAT IS RESEARCH DESIGN

4.2.1 The concept of research

According to Kerlinger (1986: 10), scientific research is “systematic, controlled, empirical and the critical investigation of natural phenomena guided by theory and hypotheses regarding the presumed relations among such phenomena.”

Kerlinger (1986: 10) notes that two areas in the definition above must be clarified. Firstly, systematic and controlled research means that scientific investigation allows the researcher to have critical confidence in research outcomes. Secondly, empirical scientific investigation offers the researcher the opportunity of testing subjective beliefs against objective reality. Mouton & Marais (1992: 7) define research as a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it. The Concise Oxford dictionary (1995: 1169) defines research as the systematic investigation into sources in order to establish facts and reach new conclusions or collate old facts by the scientific study of the subject, or by a course of critical investigation. Finally, Leedy (1985: 84) maintains that certain criteria are common to all true research and must be built into the research design at the planning stage with the discovery of new facts and their correct interpretation.

These criteria take into account the following:

- Research is a human activity that promotes critical thinking in a cross-functional approach.
• If there is no discovery, there is no research.
• There must be the interpretation of data for the enlightening awareness of what the facts mean.
• Research must always answer questions to solve problems.
• Effective research is rational, systematic and is guided by constructive, critical assumptions and measurable data (Leedy, 1993:12).

4.2.2 The concept of design

According to Yin (1994:20), design is the preparation of a working plan aimed at systematically assembling, organising and integrating data, in order to solve the research problem. The Concise Oxford dictionary (1995:1169) explains that design is a preliminary plan, concept or purpose.

From the above definitions research design can be interpreted as the preparation of an action plan aimed at organising and integrating data in an overall framework in order to solve the research problem.

There are four fundamental questions that must be resolved with respect to the data:
• Why are the data needed?
• Where are the data located?
• How will the data be secured?
• How will the data be interpreted?

The focus of research design is to maximise the validity and reliability of the research findings (Yin, 1994:20).

4.2.3 Validity and reliability
With any type of measurement, there are two very important factors that must be considered: validity and reliability. Validity is concerned with the soundness or effectiveness of the measuring instrument. The following questions can be asked:

- Does the measuring instrument measure what it is supposed to measure?
- What is the accuracy of the measurement?

There are several types of validity criteria which may be considered. The more common types, according to Leedy (1993:41), are:

- **Face validity** – relies upon the subjective judgement of the researcher.
- **Content validity** – is the accuracy with which an instrument measures the factors or situations under study.
- **Construct validity** – is any concept such as honesty that cannot be directly observed or isolated.
- **Internal validity** – is the freedom from bias in forming conclusions in view of the data.
- **External validity** – is concerned with the extent to which the conclusions that are reached can be generalised from the sample that is taken and used to clarify other cases.

Reliability deals with accuracy. According to Leedy (1993:42) it is the extent to which, on repeated measures, the indicators yield similar results. For example, reliability in quantitative research projects can be evaluated by repeating a question in a questionnaire. Reliability
confirms the accuracy with which the measurement, test, instrument, inventory or questionnaire, measures what it is intended to measure.

4.3 METHODOLOGICAL APPROACHES

There are three important contemporary methodological research approaches: the positivist, interpretative and critical. Researchers usually adopt one of these approaches and then formulate a strategy that is consistent with the approach selected (Van Biljon, 1999:34).

The positivist approach is the approach used in a physical science. This approach believes society is organised according to scientific observations and experiments and it is always possible to establish a cause and effect relationship between variables systematically and statistically (Jackson, 1995:5). Positivist research is likely to adopt a quantitative paradigm and use experiments, surveys and statistics (Gummesson 1991:152).

According to the interpretative approach, doubt is expressed over the question whether it is always possible to establish cause and effect between variables in the social sciences. For example, can the effect of poor project management decision-making on a project always be linked to a specific objective cause? The interpretative approach represents a reaction against unqualified application of positivism in the social sciences. Instead of trying to explain causal relationships by means of objective truth and statistical analysis, the interpretation process in order to understand or reconstruct reality (Van Biljon 1999:35).

The critical approach is based on the argument that researchers cannot distance themselves from people in their research. They have to empower people through their research in order to bring about social justice. It is important to note that according to Van Biljon (1999:36) this approach does not follow a fixed set of procedures.
Quantitative research is usually associated with positivism while qualitative research with interpretativism. It is best to visualise the distinction between quantitative and qualitative research as a continuum. All research methods could be placed somewhere between the extremes of pure quantitative and pure qualitative research (Jackson, 1995:13). However, it is necessary to indicate whether research projects have a more qualitative or more quantitative nature. This, in turn, plays an important role in decisions on what process to follow and which measuring instruments to select (Van Biljon, 1999:37). A summary of the main differences between qualitative and quantitative research is given in Table 4.1.

Table 4.1: Differences between qualitative and quantitative research

<table>
<thead>
<tr>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests hypothesis that researcher begins with. Hypotheses are stated explicitly and are formulated beforehand.</td>
<td>Captures and discovers meaning once the researcher becomes immersed in data. Hypotheses are frequently undeclared or stated in the form of a research goal.</td>
</tr>
<tr>
<td>Concepts are in the form of distinct variables. Concepts have an ambiguous meaning.</td>
<td>Concepts are in the form of themes, motifs, generalisations, taxonomies. Concepts can be interpreted in a number of ways.</td>
</tr>
<tr>
<td>Measures are systematically created before data collection is standardised. The researcher remains largely aloof.</td>
<td>Measures are created in an ad hoc manner and are often specific to the individual or researcher. The researcher is involved in the events/phenomena.</td>
</tr>
<tr>
<td>Data are in the form of numbers from precise measurement.</td>
<td>Data are in the form of words from documents, observations and transcripts.</td>
</tr>
<tr>
<td>Theory is largely causal and is deductive.</td>
<td>Theory can be causal or non-causal and is often inductive.</td>
</tr>
<tr>
<td>Procedures are standard and replication is assumed.</td>
<td>Research procedures are particular, and replication is very rare.</td>
</tr>
<tr>
<td>Analysis proceeds by using statistics, tables or charts and discussing how and what they show related to hypotheses.</td>
<td></td>
</tr>
</tbody>
</table>
Analysis proceeds by extracting themes or generalisations from evidence and organising data to present a coherent, consistent picture.


An important choice that researchers face is the research method to be used. Leedy (1993:145) believes that the answer to this question can be found in the nature of the data, the problem of the research, the location of the data, obtaining the data and the intention with the data. If the data is verbal, the methodology is qualitative; if it is numerical, the methodology is quantitative (Van Biljon, 1999:37).

4.3.1 Quantitative research

Mouton and Marais (1992:159) maintain that quantitative research is more highly formalised as well as more explicitly controlled than qualitative research with a range that is more exactly defined, and which, in terms of the methods used, is relatively close to the physical sciences. This definition again shows a preference for the positivist approach. Quantitative research seeks to quantify through numbers observations about human behaviour. The emphasis is on precise measurement, the testing of hypotheses based on a sample of observations and a statistical analysis of the data. Relationships among variables are described mathematically and the subject matter is treated as an object as in the physical sciences (Van Biljon, 1999:40).

Variables play a key role in quantitative research. Variables take on two or more values. Attributes, on the other hand, are the values of categories of a variable and people sometimes confuse variables with attributes.

A quantitative research project would usually test the most important causal links to be found in the research domain. This relationship between variables is usually expressed as a hypothesis, and hypotheses are tested to answer the research question or find empirical support for a theory (Neuman, 1994:99).
4.3.2 Qualitative research

Qualitative research relies on interpretative and critical approaches to social science. The aim of qualitative research is to study individuals and phenomena in their natural settings to gain a better understanding of them. It is also evident that qualitative research does not follow a fixed set of procedures (Van Biljon, 1999:41).

Mouton and Marais (1992:155) define qualitative research projects as those in which the procedures are not strictly formalised, where the scope is more likely to be under-defined, and a more philosophical mode of operation is adopted.

4.3.3 Triangulation

Leedy (1993:143) describes the situation where it is possible to combine qualitative research methods with quantitative research methods in the same project. This process is called triangulation and many research projects could be enhanced considerably if a triangulation approach were taken. The interactions between quantitative and qualitative research are illustrated in Figure 4.1.

Figure 4.1: Interaction between quantitative and qualitative research

THE METHODOLOGY OF RESEARCH
4.4 CHOOSING THE MOST APPROPRIATE RESEARCH METHOD

From the problem setting section (chapter 1) it can be seen that this research project adheres to quantitative research methods as it supports deductive reasoning and analysis. A deductive design begins with a clear conceptual framework developed from existing theory and models. The project requires the formulation of specific research hypotheses leading to a theory building exercise. A questionnaire is used to collect data, the hypotheses are accepted or rejected and causal relationships between variables are established. To further enhance this research project, qualitative research was introduced in the form of interviews. This methodological triangulation was used to ensure that the data from the questionnaire was tested in more than one way in relation to the theory.

4.5 RESEARCH GOALS AND STRATEGIES
4.5.1 Research goals

The research goals serve as guidelines for what a researcher wishes to accomplish with the research. The primary aim of this research project was to portray accurately the characteristics of a particular group, situation, interaction or object (Mouton & Marais, 1992:43). The outcome of a descriptive project is a detailed picture of the subject. According to Neuman (1994:19), the aims of descriptive projects may be to:

- Provide an accurate profile of a group;
- Describe a process, mechanism or relationship;
- Give a verbal or numerical picture;
- Find information to stimulate new explanations;
- Present basic background information or a context;
- Create a set of categories or classify types;
- Clarify a sequence, set of stages or steps;
- Document information that contributes prior beliefs about a subject.

4.5.2 Research strategy

Mouton and Marais (1992:49) explain that the two research strategies are contextual, that deals with projects such as historical sciences, languages, arts, jurisprudence and theology and secondly, general research strategy that deals with experimental studies, comparative research and various types of surveys.

For the purpose of this research project, the focus was on a general research strategy. To determine the impact of global forces on the business environment of original equipment manufacturers (OEMs) and suppliers to the OEMs were analysed and reported on. The project sample was compared on common aspects, but it was impossible to make general inferences about non-participating local or international motor and motor related companies, or even the South African automobile industry as a whole.
4.5.3 The population

The research project was conducted in three phases: the pilot survey, the actual survey and the interviews. The population for the pilot survey comprised of one OEM and two suppliers to the OEMs. The goal of the pilot survey was to test the ease of use of the questionnaire.

The actual survey’s population comprised of OEMs and suppliers to the OEMs. Due to concern about a possible low level of response to a lengthy written questionnaire, a recommended sample population of 50% of the total population was decided upon.

The population of respondents was non-homogeneous in nature and varied in terms of:

- Business turnover;
- Number of employees;
- Types of products;
- Technological level of expertise;
- Organisational structure;
- Percentage of work outsourced;
- Education levels;
- Level of competence and experience;
- Professionalism of management;
- Leadership.

Although the sample was randomly chosen, it may in fact have been biased, since the total population of 48 was based on the official supplier list of one of the OEMs. The sample distribution from the total population of 48 is depicted in Table 4.2.

Table 4.2: Sample population

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEMs</td>
<td>2</td>
<td>8.3</td>
</tr>
</tbody>
</table>
To identify 24 participants who were willing to participate in the research project 35 potential participants had to be contacted using random number selection. As a result of the expected low level of response, to further enhance this research project interviews were conducted with an additional 4 respondents. This resulted in the sample distribution from the total population of 35 changing as reflected in Table 4.3.

Table 4.3: Population as per collection instrument

<table>
<thead>
<tr>
<th>Collection instrument</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires</td>
<td>24</td>
<td>85.7</td>
</tr>
<tr>
<td>Interviews</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28</td>
<td>100</td>
</tr>
</tbody>
</table>

4.5.4 General procedure

The methodology adopted in this research project was discussed earlier in this chapter. The body of data was collected through questionnaires and interviews. This collection of data was required to test the hypotheses.

The secondary data used in this study was obtained from various local and international sources in various forms, such as articles, books, reports, the most predominant being international books originating in America and Europe.

The primary data used in this research project was acquired from observations by way of interviews, questionnaires and consultations. For the pilot survey two respondents were interviewed using a standard questionnaire (see Appendix B). The actual survey in the form
of an e-mail survey questionnaire (see Appendix B) was forwarded under a covering letter dated 29/10/2002 (see Appendix A). Although there were 35 potential respondents who had stated that they were willing to participate, the response by 24 (68.6%) was satisfactory especially considering the length of the questionnaire.

During a telephonic follow-up on outstanding questionnaires the following problems and excuses were given why questionnaires had not been completed and forwarded:

- Top management had decided not to participate in these types of surveys.
- A sudden increase in work pressure had made it impossible to complete the questionnaire.
- Export programmes had taken top priority.
- The questionnaire has been completed and mailed three weeks previously.
- The person who dealt with projects was overseas on business.
- Year-end business planning and next year’s budgets take priority.
- The respondent was too busy right now but requested to be kept in mind for the next survey.
- The questionnaire was too long and complex for the type of operation.

The approximately half an hour interviews conducted among staff members of OEMs and suppliers yielded a favourable outcome with some interesting observations and facts that would not have surfaced from any postal survey questionnaires. These interviews were unstructured to gain a better understanding within those companies. The focus was on concepts, themes, generalisations and actual versus make-believe.

The design of the questionnaire was of such a nature that the questions were all categorised according to the three respective hypotheses. This is depicted in Table 4.4.

<table>
<thead>
<tr>
<th>Categories</th>
<th>No of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business environmental influences</td>
<td>15</td>
</tr>
</tbody>
</table>
After the pilot survey was concluded and it was established that the questionnaire was acceptable to the three respondents, the 35 questionnaires incorporating 107 questions were circulated with the covering letter requesting that the completed questionnaires be returned by 18 November 2002. The questionnaires and letters were addressed to the person identified on the supplier list. Follow-up telephone calls were made and an extension was given until 14 March 2003. Twenty-four questionnaires representing 68.6% of the population of 35 had been returned. Finally, interviews were conducted with three respondents from OEMs and their suppliers based in Port Elizabeth. On average each interview lasted a half an hour.

The questionnaires that originated from the actual survey were recorded on computer disk and the data was processed and presented in tabular form by Mr J Pieterse from the Department of Mathematical Sciences at the Port Elizabeth Technikon. These results are presented in Chapter 5.

### 4.6 CONCLUSION

A formal systematic approach to research design is crucial to ensure that a research project conforms to the principles of validity and reliability. The research design decisions guide the researcher in effectively addressing the research problem. A quantitative approach was the most appropriate research strategy for this research project. Questionnaires and interviews were the main methods of data collection.
CHAPTER 5

ANALYSIS OF THE RESULTS

5.1 INTRODUCTION

The research methodology used during the study is presented in chapter 5. The data was analysed and interpreted in terms of the framework of the questionnaire. Thirty-five questionnaires were distributed of which twenty-four were returned, yielding a response rate of ± 69%. In addition to the questionnaires, four interviews were conducted. Areas that were investigated included:

• business environmental influences, covered in section 5.2;
• global forces, covered in section 5.3;
• economic forces, covered in section 5.4;
• organisational work design, covered in section 5.5;
• organisational structures, covered in section 5.6;
• interviews, covered in section 5.7

All the results of the more relevant subsections of the questionnaires were documented in tabular form as frequency and percentage of the response from the respondents. The results were visualised in the form of bar charts.

The results were summarised as the concluding results in section 5.8.

5.2 BUSINESS ENVIRONMENTAL INFLUENCES
In this section, those areas such as environmental factors and environmental analysis issues that were investigated in terms of the frequency with which they had been analysed by the target organisations are described. This in turn reveals the levels of strategic importance to organisations to remain globally competitive. The various factors that were looked at are shown in Tables 5.2.1; 5.2.2; 5.2.3 and 5.2.4.

5.2.1 Environmental factors that are analysed by organisations

Environmental factors that are analysed by organisations and the frequency of the analyses are presented in Table 5.1. Graph 5.1 visually illustrates the frequency of the analysis with relation to the various factors.

Table 5.1: Analysis of environmental factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Biannually &amp; more</th>
<th>Annually &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour market</td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Competition</td>
<td>20.8%</td>
<td>79.2%</td>
</tr>
<tr>
<td>Economic conditions</td>
<td>8.3%</td>
<td>91.7%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>12.5%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Leadership</td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Socioculture</td>
<td>62.5%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Politics</td>
<td>79.2%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Capital markets</td>
<td>54.2%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Technology</td>
<td>12.5%</td>
<td>87.5%</td>
</tr>
</tbody>
</table>

Graph 5.1: Analysis of environmental factors
5.2.2 Important environmental factors within organisations

The most important environmental factors within organisations that were established during the survey can be seen in Table 5.2 in order of importance. Graph 5.2 visually illustrates the rating of importance of the various factors.

Table 5.2: Environmental factors and their rating of importance.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Rating &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Labour market</td>
<td>4.2%</td>
</tr>
<tr>
<td>Competition</td>
<td>45.8%</td>
</tr>
<tr>
<td>Economic Conditions</td>
<td>29.2%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>8.3%</td>
</tr>
<tr>
<td>Leadership</td>
<td>0%</td>
</tr>
<tr>
<td>Socioculture</td>
<td>0%</td>
</tr>
<tr>
<td>Politics</td>
<td>0%</td>
</tr>
<tr>
<td>Capital markets</td>
<td>0%</td>
</tr>
<tr>
<td>Technology</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Graph 5.2: Environmental factors and their rating of importance.
5.2.3 Internal environmental factors that are analysed by organisations

Internal environmental factors that are analysed by organisations and the frequency of the analyses are shown in Table 5.3. The visual illustration of this analysis is shown in Graph 5.3.

Table 5.3: Frequency of analysis of certain environmental factors.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bi-annually &amp; more</td>
</tr>
<tr>
<td>HIV / AIDS</td>
<td>20.8%</td>
</tr>
<tr>
<td>Affirmative action</td>
<td>45.8%</td>
</tr>
<tr>
<td>Brain drain</td>
<td>50.0%</td>
</tr>
<tr>
<td>Unions</td>
<td>20.8%</td>
</tr>
<tr>
<td>Education &amp; training</td>
<td>25.0%</td>
</tr>
<tr>
<td>Management</td>
<td>13.5%</td>
</tr>
<tr>
<td>Continuous downsizing</td>
<td>13.5%</td>
</tr>
<tr>
<td>Automation</td>
<td>37.5%</td>
</tr>
</tbody>
</table>

Graph 5.3: Frequency of analysis of certain environmental factors.
5.2.4 Environmental analysis issues within organisations

Environmental analysis issues that were investigated during the survey are shown in Table 5.4. The graphical illustration can be seen in Graph 5.4.

Tables 5.4: Environmental issues that were investigated during the survey.
<table>
<thead>
<tr>
<th>Question</th>
<th>Large extent &amp; more</th>
<th>Small extent &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>B7 - To what extent are opportunities and threats considered during the environmental analysis process?</td>
<td>95.8%</td>
<td>4.2%</td>
</tr>
<tr>
<td>B8 - To what extent is environmental forecasting properly employed during the environmental analysis process?</td>
<td>70.8%</td>
<td>29.2%</td>
</tr>
<tr>
<td>B9 - To what extent has the impact of global issues on organisations been assessed and analysed?</td>
<td>91.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>B10 - To what extent has the impact of social responsibility issues on organisations been assessed and evaluated?</td>
<td>33.3%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Graph 5.4: Environmental issues that were investigated during the survey

5.3 GLOBAL FORCES

5.3.1 Various pressures that are exerted on organisations by global forces
Global forces exert various types of pressure on organisations. Table 5.5 shows an evaluation of some of these pressures. Graph 5.5 is a visual representation of the pressures that were evaluated in Table 5.5.

**Table 5.5: Evaluation of the extent of the pressure that is exerted by global forces.**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td>B13 – To what extent does the environmental analysis take international issues into account?</td>
<td>100% 0%</td>
</tr>
<tr>
<td>C2 – To what extent do global forces influence the economic conditions of companies?</td>
<td>100% 0%</td>
</tr>
<tr>
<td>C4 – To what extent have global competitors influenced organisations to be more proactive in competing for higher standards and market share?</td>
<td>91.7% 8.3%</td>
</tr>
<tr>
<td>C5 – To what extent have global competitors influenced organisations to alter their business strategies?</td>
<td>75.0% 25.0%</td>
</tr>
<tr>
<td>C6 – To what extent have organisations had to increase productivity to remain competitive?</td>
<td>70.8% 29.2%</td>
</tr>
<tr>
<td>C7 – To what extent do organisations monitor the world markets in search of possible business?</td>
<td>83.3% 16.7%</td>
</tr>
</tbody>
</table>

**Graph 5.5: Evaluation of the extent of the pressure that is exerted by global forces.**
5.4 ECONOMIC FORCES

5.4.1 Organisational competitiveness

The effects that economic forces have on organisations’ ability to remain globally competitive are shown in Table 5.6. The results of the effects shown in Table 5.6 are visually illustrated in Graph 5.6.

Table 5.6: The effect of economic forces on organisational competitiveness.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large extent &amp; more</td>
</tr>
</tbody>
</table>

The effects that economic forces have on organisations’ ability to remain globally competitive are shown in Table 5.6. The results of the effects shown in Table 5.6 are visually illustrated in Graph 5.6.

Table 5.6: The effect of economic forces on organisational competitiveness.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large extent &amp; more</td>
</tr>
</tbody>
</table>

The effects that economic forces have on organisations’ ability to remain globally competitive are shown in Table 5.6. The results of the effects shown in Table 5.6 are visually illustrated in Graph 5.6.

Table 5.6: The effect of economic forces on organisational competitiveness.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large extent &amp; more</td>
</tr>
<tr>
<td>Question</td>
<td>Small Extent (%)</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>D1 – To what extent has the fact that trade barriers are being reduced made it more difficult for organisations to remain competitive?</td>
<td>33.3%</td>
</tr>
<tr>
<td>D2 – To what extent have organisations' product lines had to be extended, in order to compete in several markets?</td>
<td>25.0%</td>
</tr>
<tr>
<td>D3 – To what extent have organisations', had to be continuously improved their business performance due to strong competition?</td>
<td>87.5%</td>
</tr>
<tr>
<td>D4 – To what extent have international operations become more viable to organisations?</td>
<td>83.3%</td>
</tr>
<tr>
<td>D4 – To what extent have occurrences that were brought on due to pressure from competitors had a negative impact on the morale of the employees at organisations?</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

**Graph 5.6 The effect of economic forces on organisational competitiveness**

5.4.2 Technical advantages within organisations
An evaluation of the various technical advantages that organisations must have to remain globally competitive is evaluated in Table 5.7. The results of the effects shown in Table 5.6 are visually illustrated in Graph 5.7.

Table 5.7: Evaluation of the technical advantages within organisations.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D19 – To what extent do the latest technological advancements play a big role in organisational competitiveness?</td>
<td>79.2%</td>
<td>20.8%</td>
</tr>
<tr>
<td>D20 – To what extent do organisations have adequate R&amp;D facilities that keep up with the latest technological changes?</td>
<td>75.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>D21 – To what extent does the relatively inexpensive labour cost play a role in organisational ability to obtain export business?</td>
<td>20.8%</td>
<td>79.2%</td>
</tr>
<tr>
<td>D23 – To what extent are the technical personnel in organisations adequately qualified for their positions?</td>
<td>95.8%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Graph 5.7: Evaluation of the technical advantages within organisations.
5.5 ORGANISATIONAL WORK DESIGN

In this section, organisational work design is analysed in terms of the organisational environment, job analysis within organisations, utilisation of the various methods of work enhancement and job characteristics.

5.5.1 Work design within the organisational environment

The evaluation of the work design methods within organisations is shown in Table 5.8. The results of the analysis are illustrated in Graph 5.8.

Table 5.8: Evaluation of the work design methods within organisations.
### Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1 – To what extent has the environment influenced the current methods of work design?</td>
<td>100%</td>
</tr>
<tr>
<td>E2 – To what extent does the current methods of work design satisfy the needs of the external environment?</td>
<td>100%</td>
</tr>
<tr>
<td>E3 – To what extent do the current methods of work design make it possible for organisations to be globally competitive?</td>
<td>87.5%</td>
</tr>
<tr>
<td>E6 – To what extent do organisations utilise their workforce’s skills and abilities?</td>
<td>100%</td>
</tr>
<tr>
<td>E7 – To what extent do the current methods of work design take the employees’ needs into account?</td>
<td>70.8%</td>
</tr>
</tbody>
</table>

**Graph 5.8: Evaluation of the work design methods within organisations**

#### 5.5.2 Job analysis and job design within organisations
Job analysis and job design within organisations is shown in Table 5.9. The graphical presentation of the results is shown in Graph 5.9.

Table 5.9: Evaluation of Job analysis and job design within organisations

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
<th>Large extent &amp; more</th>
<th>Small extent &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>E16 – To what extent are HR departments qualified to perform job analysis exercises?</td>
<td></td>
<td>33.3%</td>
<td>66.7%</td>
</tr>
<tr>
<td>E18 – To what extent is the creativeness and flexibility of the employees utilised within organisations?</td>
<td></td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>E19 – To what extent do organisational job design methods focus on customer satisfaction?</td>
<td></td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>E21 – To what extent do organisations empower employees to make work related decisions?</td>
<td></td>
<td>79.2%</td>
<td>20.8%</td>
</tr>
<tr>
<td>E22 – To what extent do organisational job design methods focus on the quality of the product?</td>
<td></td>
<td>83.3%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Graph 5.9: Evaluation of Job analysis and job design within organisations
5.5.3 Job rotation, job enlargement and job enrichment

Evaluation of Job rotation, job enlargement and job enrichment within organisations is shown in Table 5.10. The graphical results are shown in Graph 5.10.

Table 5.10: Evaluation of Job rotation, job enlargement and job enrichment within organisations

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large extent &amp; more</td>
</tr>
</tbody>
</table>


Graph 5.10: Evaluation of Job rotation, job enlargement and job enrichment within organisations

5.5.4 Job characteristics

Evaluation of various Job characteristics within organisations is shown in Table 5.11. The graphical illustration of the results is shown in Graph 5.11.

Table 5.11: Evaluation of various Job characteristics within organisations

| Job characteristic     | Frequency & %          |  |
|------------------------|------------------------|--|---|
| Compressed work weeks  | 0%                     | 100% |
| Job sharing            | 8.3%                   | 91.7% |
| Telecommuting          | 0%                     | 100% |
Graph 5.11: Evaluation of various Job characteristics within organisations

5.6. ORGANISATIONAL STRUCTURES

Organisational structures were analysed in terms of customer orientation, fulfilment of company objectives and the types of structures that are used within organisations.
5.6.1 Customer orientation

An analysis of the extent to which organisational structures meet the needs of customers is shown in Table 5.12. The results of the analysis are graphically illustrated in Graph 5.12.

Table 5.12: The extent to which organisational structures meet the needs of customers

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 – To what extent do organisations meet the needs of the customer base?</td>
<td>100% 0%</td>
</tr>
<tr>
<td>F2 – To what extent do current organisational structures make it possible for customer requirements to be met?</td>
<td>83.3% 16.7%</td>
</tr>
<tr>
<td>F4 – To what extent have current organisational strategies influenced organisational structures?</td>
<td>100% 0%</td>
</tr>
</tbody>
</table>

Graph 5.12: The extent to which organisational structures meet the needs of customers
5.6.2 Fulfilment of company objectives

An analysis of the extent to which the structure satisfies the company objectives is shown in Table 5.13. The results of the analysis are graphically illustrated in Graph 5.13.

Table 5.13: The extent to which the structure satisfies the company objectives

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency &amp; %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large extent &amp; more</td>
</tr>
<tr>
<td>F1</td>
<td></td>
</tr>
<tr>
<td>F2</td>
<td></td>
</tr>
<tr>
<td>F4</td>
<td></td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>F8</td>
<td>Optimisation of recourse utilisation.</td>
</tr>
<tr>
<td>F9</td>
<td>Stipulate the accountability of work done by all the employees within an organisation.</td>
</tr>
<tr>
<td>F10</td>
<td>Co-ordinate all activities within the organisation.</td>
</tr>
<tr>
<td>F11</td>
<td>Attend to employee social satisfaction.</td>
</tr>
<tr>
<td>F12</td>
<td>Establish the direction of the flow of information within the organisation.</td>
</tr>
<tr>
<td>F13</td>
<td>Flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.</td>
</tr>
</tbody>
</table>

Graph 5.13: The extent to which the structure satisfies the company objectives

5.6.3 Structures that are used within organisations

An analysis of the various structures that are used by organisations is shown in Table 5.14.

The results of the analysis are graphically illustrated in Graph 5.14.
Table 5.14: Various structures that are used by organisations

<table>
<thead>
<tr>
<th>Type of organisation</th>
<th>% Utilised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic organisation</td>
<td>20.8%</td>
</tr>
<tr>
<td>Mechanistic organisation</td>
<td>29.2%</td>
</tr>
<tr>
<td>Mix of both Organic &amp; Mechanistic</td>
<td>12.5%</td>
</tr>
<tr>
<td>Matrix organisation</td>
<td>16.7%</td>
</tr>
<tr>
<td>Network organisation</td>
<td>0%</td>
</tr>
<tr>
<td>Multidivisional organisation</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

Graph 5.14: Various structures that are used by organisations

5.7 INTERVIEWS:

Interviews were conducted with various people to obtain a wider in depth understanding to the answers that were given in the questionnaires. Table 5.15 shows the people who were interviewed and their positions within the respective organisations. It also shows the departments and the company type.
Table 5.15: Information regarding the people that were interviewed

<table>
<thead>
<tr>
<th>Organisational level</th>
<th>Department</th>
<th>Member</th>
<th>Company Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>Human Resources</td>
<td>1</td>
<td>Supplier</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Strategic planning</td>
<td>1</td>
<td>Supplier</td>
</tr>
<tr>
<td>HR Officer</td>
<td>Human Resources</td>
<td>1</td>
<td>OEM</td>
</tr>
<tr>
<td>Manager</td>
<td>Purchasing</td>
<td>1</td>
<td>Supplier</td>
</tr>
</tbody>
</table>

Questions were asked according to Tables 5.1 to 5.14 (mentioned in the sections above). The results from the various interviews follow in the following sections.

- Regarding the question concerning the frequency of analysing specific environmental factors (see Table 5.1), all the supplier representatives responded that Competition was reviewed annually together with Economic Conditions. The OEM representative mentioned that Suppliers and Labour Markets were also reviewed annually.

- Respondents’ comments on the three most important environmental factors (see Table 5.2) were as follows. The three supplier representatives rated Competition as number one, Technology as number two and Economic Conditions as number three. The OEM rated Suppliers as number one, Labour Market as number two and Competition as number three.

- The general feeling regarding analysing environmental factors (see Table 5.3) was as follows.
HIV/AIDS: Reviewed annually, but will be looked at biannually from 2004.

Affirmative action: All representatives indicated that it was looked at on a biannual basis.

Brain drain: Reviewed less than annually.

Unions: Reviewed annually.

Education & Training: Reviewed annually.

Management: Reviewed less than annually.

Continuous down sizing: Reviewed less than annually or not at all.

Automation: One of the suppliers was reviewing it biannually and the remainder of suppliers only annually.

- (See Table 5.4, question B7) All of the representatives felt that Opportunities and Threats were covered to a large extent (see Table 5.4, question B7). All but one of the supplier representatives mentioned that Environmental Forecasting (see Table 5.4, question B8) was properly done during the environmental analysis process. One supplier commented that there was room for improvement in their company. (see Table 5.4, questions B9 and B10).

- All of the representatives answered that they took international issues into account during environmental analysis (see Table 5.5, question B13). A similar response was given towards the question (see Table 5.5, question C2) regarding the influence of global forces on the economic conditions of the companies, which then led to these organisations becoming more proactive with regard to competing for market share (see Table 5.5, question C4). This in turn led to the
alteration of business strategies (see Table 5.5, question C5). Only the suppliers suggested that they had to increase productivity to remain competitive (see Table 5.5, question C6). The OEM representative noted that they had to find ways of cutting costs to remain competitive. All four companies monitored the world markets in search of possible business (see Table 5.5, question C7).

- All of the representatives commented that they had to continuously improve their business performance due to strong competition. (See Table 5.6, question D3) The improved business performance then led to the viability of international markets. (See Table 5.6, question D4)

- According to the all the representatives, technological advancement and adequately qualified personnel play an important role in organisational competitiveness. (See questions in Table 5.7)

- The feedback regarding the importance of work design was also unanimous, as all the representatives felt that the environment played a big role in their current work design, especially the rate and quality of production. Work design also gave companies the competitive edge in dealing with efficiency and utilisation of the workforce’s skills. This in turn led to better customer satisfaction (see Table 5.8)

- Only one of the suppliers and the OEM effectively used Job rotation, job enlargement and job enrichment. The other two made use of job rotation for on the job training requirements (see Table 5.10).

- The respondents all felt that they succeeded in meeting the needs of their customers and that their structures played a big roll in achieving this (see Table 5.12, questions F1 & F2). Their current structures were
very lean and promoted optimum resource utilisation and established the effective flow of information throughout their organisations (see Table 5.12, question F8 & F12). Their structures also clearly outlined the accountability of the various employees and thus co-ordinated all activities within their organisations (See Table 5.12, question F9 & F10). Furthermore, the structures made flexibility to react to environmental demands possible (see Table 5.12, question F13).

- The OEM and one of the suppliers made use of a Mechanistic structure, whereas the remaining two suppliers used a Matrix and a Multidivisional structure, respectively (see Table 5.14).

5.8 CONCLUDING REMARKS

The above mentioned data can be summarised as follows:

- The three most important environmental factors were “Competition”; “Economic Conditions” and “Technology” in that order.

- According to the respondents, “Brain drain”; “Affirmative action” and “Automation” were analysed more frequently than “HIV / AIDS”.

- Global / International issues were important to organisations and were analysed to a large extent. The reason is that global forces influence the economic conditions of organisations in a big way. To compensate for the strong competition, organisations have to continuously improve their business performance.

- It was also established that technological advancement plays a big role in organisational competitiveness.
• All the respondents felt that the external environment influenced their current methods of work design to a large extent and that their current work designs satisfied the needs of the customers. The mutual feeling between the respondents was that their current work designs made it possible for them to be globally competitive.

• According to feedback from the sample population, “Job rotation”, “Job enlargement” and “Job enrichment” were not frequently implemented within the target organisations. “Flexi-time” was only used 29.2% within the sample population.

• It was also found that all the respondents felt that they satisfied the needs of their customer base with the aid of their organisational structures. Feedback also revealed that the whole sample population suggested that their strategies influenced their structures to a large extent.

• The results showed that 75% of the sample population believed that their organisational structures co-ordinated all activities within their organisations.

• Feedback on the type of structures that were used by organisations revealed that all the organisational types on the list, except Network structures were used by the sample organisations.
Chapter 6

TESTING THE HYPOTHESES

6.1 INTRODUCTION

Testing of the hypotheses relates to the comparison of the results obtained from the questionnaires compared with the stated hypotheses that were derived from the relative sub-problems. The main hypotheses could not be tested directly, and had to be broken down into sub-hypotheses.

In order to test the hypotheses, the standard statistical inferential procedure about a population proportion was used. This procedure is described in most statistical textbooks, e.g. Keller and Warrack, 2003: 34 - 38.
The test statistic for this procedure is

\[ z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1 - p_0)}{n} \sqrt{\frac{N - n}{N - 1}}}} \]  

(1)

where \( p_0 \) is the hypothesized proportion under the null hypothesis, 
\( \hat{p} \) is the corresponding proportion in the sample, 
\( \sqrt{\frac{p_0(1 - p_0)}{n}} \) is the estimated standard error of \( \hat{p} \) and 
\( \sqrt{\frac{N - n}{N - 1}} \) is the finite population correction factor.

Since the alternative hypotheses are one-sided (population proportion > 0.7), the critical value under the standard normal distribution is \( z_{\alpha} \) and since we are testing at the 5% level, we use \( z_{0.05} = 1.645 \).

The decision that will be made using the above information is the following: If the test statistic \( z \) is greater than the 5% critical value (1.645), then we reject the null hypothesis and say with 95% confidence that the population proportion is greater than 0.7. However, if the test statistic is equal to or less than 1.645, we say that we do not have enough evidence to reject the null hypothesis.

As mentioned in Chapter 1, there are three main hypotheses of which each have five sub-hypotheses. The three main \( H_0 \) hypotheses are:

- Global forces have an impact on the business environment.
- Work design and organisational structures can assist organisations in managing the effects of global forces.
• Organisations adopt different structures and work designs to deal with the effect of global forces.

6.2 THE FIRST HYPOTHESIS

To test the first main hypothesis “The impact of global forces on the business environment”, the following five sub-hypotheses were investigated:

• Global forces influence the economic conditions of a company.

• Global competitors have, to a large extent, influenced organisations to be more proactive in competing for higher standards and market share.

• Global competitors have, to a large extent, influenced organisations to alter its business strategies.

• Strong competition has influenced organisations to such an extent that it had to continuously improve its business performance.

• The latest technological advancements play a big role in organisational competitiveness.

The sub-hypotheses were addressed in Table 6.1, by answering six questions:

C2 – To what extent do global forces influence the economic condition of a company?

C4 – To what extent have global competitors influenced organisations to be more proactive in competing for higher standards and market share?

C5 – To what extent have global competitors influenced organisations to alter their business strategies?

D3 – To what extent have organisations had to continuously improve their business performance due to strong global competition?

D16 – To what extent do the majority of employees at organisations work well together as a team?
D19 – To what extent do the latest technological advancements play a big role in organisational competitiveness?

The feedback to these questions is graphically illustrated in Graph 6.1.

Table 6.1: The impact of global forces on the business environment

<table>
<thead>
<tr>
<th>Question</th>
<th>p_hat</th>
<th>p0</th>
<th>se</th>
<th>fpc</th>
<th>z_crit</th>
<th>test_statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>C4</td>
<td>0.917</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>4.0785</td>
</tr>
<tr>
<td>C5</td>
<td>0.75</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>0.9397</td>
</tr>
<tr>
<td>D3</td>
<td>0.875</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>3.2891</td>
</tr>
<tr>
<td>D16</td>
<td>0.792</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>1.7291</td>
</tr>
<tr>
<td>D19</td>
<td>0.792</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>1.7291</td>
</tr>
</tbody>
</table>

C2 - From the table above, 100% of the completed questionnaires indicated that global forces influenced the economic conditions of companies to a large extent.

C4 - According to the feedback, 92% of the sample population was under the impression that global competitors influenced organisations to a large extent to be proactive in competing for higher standards and market share.

C5 – The response to whether global competitors influenced organisations to a large extent to alter their business strategies revealed that 75% of the sample population experienced it.

D3 – 87% of the sample population replied that they had to continuously improve their business performance due to strong competition.

D16 – 79% of the sample population felt that the latest technological advancements play a big role in organisational competitiveness.

D19 – According to 79% of the sample population, their companies received significant benefit from a government rebate system.

From the results, it can be concluded that all five of the sub-hypotheses were proven to be correct.
Graph 6.1: The impact of global forces on the business environment

From the response to the sub-hypotheses above, it can be summarised that global forces definitely have an impact on the business environment. This means that the survey as depicted in Table 6.1, strongly favours the acceptance of the first main hypothesis.

6.3 THE SECOND HYPOTHESIS

To test the second main hypothesis “To what extent do organisational structures assist organisations in managing the effects of global forces”, the following five $H_0$ sub-hypotheses were investigated:

- The environment has influenced the current methods of work design.
- The current work design satisfies the need of the external environment.
- The current work design in organisations makes it possible for them to be globally competitive.
- Organisations fully utilise their workforce’s skills and abilities.
- The creativeness and flexibility of the employees within the organisation are fully utilised to maximum potential.

The sub-hypotheses were addressed in Table 6.2, by answering five questions:

E1 – To what extent has the environment influenced current methods of work design?
E2 – To what extent does the current work design satisfy the needs of the external environment?

E3 – To what extent does the current work design make it possible for organisations to be globally competitive?

E6 – To what extent do organisations utilise their workforce’s skills and abilities?

E18 – To what extent is the creativeness and flexibility of the employees utilised to maximum potential within the organisation?

The feedback to these questions is graphically illustrated in Graph 6.2.

Table 6.2: The extent to which organisational structures and work designs assist organisations to deal with the effects of global forces

<table>
<thead>
<tr>
<th>Question</th>
<th>p_hat</th>
<th>p0</th>
<th>se</th>
<th>fpc</th>
<th>z_crit</th>
<th>test_statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>E2</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>E3</td>
<td>0.875</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>3.2891</td>
</tr>
<tr>
<td>E6</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>E18</td>
<td>0.583</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>-2.1990</td>
</tr>
</tbody>
</table>

E1 – 100% of the sample population confirmed that the environment influenced their current method of work design to a large extent.

E2 – According to 100% of the sample population, their current method of work design satisfy the needs of the external environment.

E3 – 87% of the completed questionnaires revealed that the current methods of work design made it possible for organisations to be globally competitive.

E6 – Once again, 100% of the sample population exclaimed that they utilised their workforce’s skills and abilities to a large extent.

E18 – Only 58% of the sample population felt that the creativeness and flexibility of employees were utilised to their maximum potential. Which means that this is an area that needs to be developed and utilised to enhance competitiveness and flexibility.
From the results, it can be concluded that the first four sub-hypotheses were proven to be correct and only the last one regarding the utilisation of creativeness and flexibility of employees within organisations were proven not to be utilised to a large extent.

**Graph 6.2: The extent to which organisational structures and work designs assist organisations to deal with the effects of global forces**

Due to the fact that all, but one of the sub-hypotheses in table 6.2 were confirmed, it is clear that organisations have adopted work designs that can assist organisations in managing the effect of global forces. The findings of the written survey and the response obtained from the interviews strongly supports the null hypothesis.

### 6.4 THE THIRD HYPOTHESIS

To test the second main hypothesis “Organisations adopt different structures and work designs to deal with the effects of global forces. ”, the following five $H_0$ sub-hypotheses were investigated:

- Organisations meet the need and demands of customers.
The current organisational structures make it possible for organisational requirements to be met.

Current strategies influence organisational structures.

Organisations optimise their resource utilisation.

Organisations have flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.

The sub-hypotheses were addressed in Table 6.3, by answering five questions:

F1 – To what extent does the organisation meet the needs and demands of the customer base?

F2 – To what extent does the current organisational structure make it possible for the customer requirements to be met?

F4 – To what extent has the current strategy influenced the organisational structure?

F8 – Does the structure assist with the optimisation of resource utilisation?

F13 – Does the structure assist with flexibility to respond rapidly to future demands and developments caused by evolving environmental influences?

The feedback to these questions is graphically illustrated in Graph 6.3.

<table>
<thead>
<tr>
<th>Question</th>
<th>p_hat</th>
<th>p0</th>
<th>se</th>
<th>fpc</th>
<th>z_crit</th>
<th>test_statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>F2</td>
<td>0.833</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>2.4997</td>
</tr>
<tr>
<td>F4</td>
<td>1</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>5.6384</td>
</tr>
<tr>
<td>F8</td>
<td>0.625</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>-1.4096</td>
</tr>
<tr>
<td>F13</td>
<td>0.708</td>
<td>0.7</td>
<td>0.093541</td>
<td>0.5688</td>
<td>1.645</td>
<td>0.1504</td>
</tr>
</tbody>
</table>

Table 6.3: Organisations adopt different structures and work designs to deal with the effects of global forces.
F1 – 100% of the questionnaires have indicated that organisations meet the needs and demands of the customer base.

F2 – 83% of the sample population were under the impression that their organisational structure made it possible for their customer requirements to be met.

F4 – The whole sample population (100%), suggested that their current strategy has influenced their organisational structure to a large extent.

F8 – According to the data, only 62% of the sample population believed that their organisational structures optimised their resource utilisation to a large extent.

F13 – Only 71% of the sample population were confident that their organisational structures allowed flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.

From the results, it can be concluded that the four of the five sub-hypotheses were proven to be correct and only the one (question F8) regarding the utilisation of resources within organisations were proven not to be utilised to a large extent.

**Graph 6.3: Organisations adopt different structures and work designs to deal with the effects of global forces**
From the data in table 6.3 of the sub-hypotheses above, it is clear that organisations have adopted structures that meet the needs of the environment. However, according to the sample population, there is some area for improvement in terms of flexibility and resource optimisation. This clearly shows that the findings of both the written and interview surveys, supported the main hypothesis.

Chapter 7

FINAL CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

It would be incomplete to finalise any research project without investigating the possible implications of the research results. In this chapter, the main findings are highlighted, problems and limitations associated with the research process are addressed and limitations for application of the findings are presented.
7.2 MAIN FINDINGS

The study’s main aims were firstly to investigate whether global forces had a big influence on organisations in South Africa and secondly, what structural and work designs manufacturing organisations can use to deal with the effects of global forces.

From that data that was obtained from the written survey and the interviews, it is clear that global forces most definitely have an impact on organisations in South Africa. Ninety-one point seven percent of the written survey sample and all the respondents indicated that the impact of global issues was assessed and analysed to a large extent. All the respondents replied that global forces influenced the economic conditions of their companies. Ninety-one point seven percent maintained that global forces influenced organisations to be more proactive in competing for market share.

Investigation of the literature produced a variety of methods and suggestions that organisations could use to improve on work design and organisational structures to suit their strategies. By using some of the suggestions, organisations could become much more competitive.

The feedback from the questionnaires and the interviews showed that organisations did not utilise many of the latest methods of work design, but that they were confident that they satisfied the needs of their customers. They also felt that their current work designs made it possible for them to be globally competitive. As support for the above statement, it was evident that only thirty-three point three percent of the sample population utilised job rotation to a large extent and only forty five point eight percent utilised job enlargement. However, sixty six point seven percent implemented job enrichment. In addition, only twenty nine point two percent made use of flexitime in their organisations.

Regarding the organisational structures, the entire sample population was under the impression that they satisfied the needs of their customer base to a large extent. One Hundred percent of the respondents indicated that their organisational strategies had influenced their
structures to a large extent. Their structures also made it possible for organisations to respond rapidly to future customer and environmental demands.

When it came to the various types of organisations, there was an evenly split. Twenty-nine point two percent implemented mechanistic structures, twenty point eight percent organic structures, twenty point eight percent multidivisional structures, sixteen point seven percent matrix structures and twelve point five percent made use of a mixture of both organic and mechanistic structures.

7.3 RECOMMENDATIONS

To conclude this research study in a proper manner, recommendations should be made to suggest areas where further studies would be appropriate. The following recommendations are made, either as a direct result of research activities, or from observations during the process.

7.3.1 Business environmental influences

The following environmental factors should be analysed more frequently by organisations:

- Competition – It is continuously changing and should be assessed at least by-annually to prevent organisations from falling behind and to ensure that they remain competitive.

- Suppliers – They are one of the most important factors within a manufacturing organisation and will either contribute in assisting the customer on its way to the top, or cause its downfall. Therefore it is important to assess suppliers on a continual basis.

- Technology – This factor should also be assessed on a regular basis to create a culture of continual improvement within the organisation.

- HIV / AIDS – According to the assessment results, this factor is only assessed annually or less by 79.2% of the respondent organisations. According to Government and other health organisations, this will soon become one of the biggest causes of absenteeism and loss of experienced work force within organisations. This thus necessitates organisations to be more proactive when dealing with this issue.
• Education and training – This factor is very important to organisations due to the fact that it improves worker efficiency and skills to do a better job. It will also increase the sense of loyalty through promoting from within the organisation.

### 7.3.2 Economic forces

• From the feedback on whether the relatively low labour cost in South Africa played a role in ensuring additional export business, it was strange to see that only 20.8% of the sample population strongly agreed.

### 7.3.3 Organisational work design

• According to the feedback from the respondents and from the verbal responses during the interviews, it could be said that very little of the theory that is currently available, has been utilised by the target organisations.

• It was also strange to see that only 70.8% of the sample population felt that their organisations took their employees’ needs into account.

• Only 33.3% of the respondents felt that their HR departments were qualified to do job analysis exercises, which could mean that they either outsourced the function or alternatively did a bad job of it.

• An interesting finding was that only 58.3% of the sample population stated that the creativeness and flexibility of the employees were utilised within their organisations. As this would play a big role in employee development and organisational morale, it would be a challenging field to investigate.

### 7.3.4 Organisational structures

• From the response that was received regarding the function of organisational structures, it was clear that this was an area that should be covered in more detail during future studies. Organisations are at this stage, sticking to what they know and are not very adventurous when it comes to implementing new structures or restructuring.
BIBLIOGRAPHY


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   Today’s Global Mobility: Short-term Assignments and Other Solutions.


Annexure A

29 October 2002
Survey on the business environmental influences on organisational structures and work designs.

Dear Colleague

I am currently investigating the extent of the effect that global forces have on South African organisational structures and work designs, where part of the survey is on environmental influences. For this reason, a number of selected organisations, including yours, have been chosen to participate in this survey.

The main purpose of the survey is to evaluate the various structures and work designs that are currently being used by organisations to deal with the effect of global forces.

As a result of your involvement in, and experience of the motor industry in the dynamic environment of South Africa, your views and opinions concerning the existing applications of organisational structures and work designs will be of major importance, not only to this study, but also as a further contribution to the advancement of organisational design in South Africa.

Please find enclosed a questionnaire for your consideration and completion. Please return the completed questionnaire to me no later than 7 November 2002.

Should you require any further information concerning this survey, do not hesitate to contact Ashley Kapp at:
Telephone: 041 4024126 (work) 0824681815 (cell)
Fax 041 4024196 e-mail ashley.kapp@af.omgi.com

Thank you for your time and willingness to participate.

Sincerely

Ashley Kapp
(MBA student)
THE IMPACT OF GLOBAL FORCES ON THE BUSINESS ENVIRONMENT:

Information gathered is for research purposes only and no individual or organisation will be compromised in any way. No South African organisation or individual will be identified in the final report. For South African organisations with global attachments (branches), this questionnaire must be seen from a global point of view.

SECTION A: Your organisation

1. Organisation’s Number

2. Number of Employees

3. Do you have an in-house Human Resources department?
   YES
   O

4. Does your organisation have any global attachments (branches)?
   YES
   O

Section B: Business environmental influences

1. How often are the following environmental factors analysed by your organisation?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Never</th>
<th>Less than Annually</th>
<th>Annually</th>
<th>Six - Monthly</th>
<th>Monthly</th>
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<tbody>
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<td>Labour market</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td></td>
<td></td>
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</tr>
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<td>Leadership</td>
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<td>Socioculture</td>
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</tr>
<tr>
<td>Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Does your organisation re-evaluate the environmental analysis on a regular basis?

<table>
<thead>
<tr>
<th>Neve</th>
<th>Less than</th>
<th>Annually</th>
<th>Six - Monthly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. From the list below, choose the three most important environmental factors within your organisation and rate them from 1 to 3 in order of importance (1 = most important).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour market</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>Economic conditions</td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td>Socioculture</td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td></td>
</tr>
<tr>
<td>Capital markets</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
</tbody>
</table>

4. How often are the following market factors analysed by your organisation?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Never</th>
<th>Less than</th>
<th>Annually</th>
<th>Six - Monthly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV / AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affirmative action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education and training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous downsizing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annexure B
5. To what extent are the following factors in the macro environment (external environment) considered as part of the environmental analysis?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities and threats</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. To what extent does your organisation take into account the varying relevance of different environmental levels in performing its environmental analysis?

<table>
<thead>
<tr>
<th>Level</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. To what extent does your organisation thoroughly consider threats and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>opportunities during the environmental analysis process?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. To what extent is environmental forecasting properly employed during</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the environmental analysis process?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. To what extent has the impact of global issues on your organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>been assessed and analysed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. To what extent has the impact of social responsibility issues on your</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>organisation been assessed and evaluated?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Is enough information about the environment available from generally accepted data sources for your organisation to do proper strategic planning?

   YES  NO
12. Are all levels of management appropriately involved in the environmental analysis process?

YES  NO

13. To what extent does the environmental analysis take international issues into account?

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Blank)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Volatile</th>
<th>Moderately stable</th>
<th>Completely stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. How stable is the business environment that your organisation is operating in?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Blank)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Does your organisation do continuous scanning of the business environment?

YES  NO

Section C: Global forces

1. Is your organisation globally competitive?

YES  NO

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>More than average</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To what extent do global forces influence the economic condition of your company?</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(Blank)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What percentage of your competitors is of a global origin?

<table>
<thead>
<tr>
<th>None</th>
<th>&lt;Half</th>
<th>&gt;Half</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Not at all</td>
<td>Small extent</td>
<td>Large extent</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>4. To what extent have global competitors influenced your organisation to be more proactive in competing for higher standards and market share?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To what extent have global competitors influenced your organisation to alter your business strategies?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. To what extent has your organisation had to increase productivity to remain competitive?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. To what extent does your organisation monitor the world markets in search for possible business?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section D: Economic Forces

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent has the fact that trade barriers are continuously being reduced made it more difficult for your organisation to remain competitive?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To what extent have your organisation’s product lines had to be extended because you now have to compete in several markets?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To what extent has your organisation’s business performance had to be continuously improved due to strong competition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To what extent have international operations become more viable to your organisation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To what extent have occurrences that were brought on due to pressure from the competitors had a negative impact on the morale of the employees at your company?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Has the number of employees in your organisation had to be increased to cope with the potentially higher production volumes during the past five years? Indicate the approximate % increase.

<table>
<thead>
<tr>
<th>No increase</th>
<th>1-10%</th>
<th>11-20%</th>
<th>21-50%</th>
<th>&gt; 50%</th>
</tr>
</thead>
</table>

Annexure B
7. What actual percentage of your raw materials is sourced locally?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51-70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. To what extent has the decreasing value of the Rand facilitated an increase in export business?

9. To what extent has the current value of the Rand had a positive influence on the current financial position of your organisation?

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. To what extent has the decreasing value of the Rand facilitated an increase in export business?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. To what extent has the current value of the Rand had a positive influence on the current financial position of your organisation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Have raw materials had a shorter lead-time due to it being sourced globally? (Answer only if you do acquire raw materials from other countries.)

   YES    NO

11. Have machinery parts had a shorter lead-time due to it being sourced globally? (Answer only if you do acquire raw materials from other countries.)

   YES    NO

12. Have raw materials become cheaper due to it being sourced globally? (Answer only if you do acquire raw materials from other countries.)

   YES    NO

13. Have machinery parts become cheaper due to it being sourced globally? (Answer only if you do acquire raw materials from other countries.)

   YES    NO

14. Have the good relationships between your organisation’s employees and those of the suppliers and customers resulted into shorter lead-times for raw materials / delivery of product?

   YES    NO

Annexure B

15. Do the majority of the employees at your organisation adopt the team-approach at work?
<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. To what extent do the majority of the employees at your organisation work well together as a team?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. To what extent are the employees at your organisation aware of the organisation’s key performance areas?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. To what extent are the employees at your organisation aware of the strive towards continuous improvement and do they actively participate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. To what extent do the latest technological advancements play a big role in your organisational competitiveness?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. To what extent does your organisation have an adequate R&amp;D facility that keeps up with the latest technological changes?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. To what extent does the relatively inexpensive labour costs play a role in your organisation’s ability to obtain export business?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. To what extent does your organisation receive significant benefit from governmental rebate systems?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. To what extent are the technical personnel in your organisation adequately qualified for their positions?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. To what extent has HIV / AIDS had a large negative effect on your organisation due to loss of income and productivity?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Does HIV / AIDS mainly effect the employees between the ages 20 to 40 gap within your organisation? (If applicable)

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

26. Does your organisation have any problems related to skilled employees that have left the company for better job opportunities abroad?
27. Has your organisation been involved in a merger with another company?

[YES] [NO]

28. Has your organisation been involved in an acquisition by another company?

[YES] [NO]

29. Has your organisation been involved in a joint venture with another company?

[YES] [NO]

30. Has the merger, acquisition or joint venture had a positive or negative effect on the business side of your organisation?

[Pos effect] [No Effect] [Neg Effect]

31. Has the merger, acquisition or joint venture had a positive or negative effect on the people side of your organisation?

[Pos effect] [No Effect] [Neg Effect]

Annexure B

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>32. To what extent has Affirmative action</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and its aims been addressed throughout all levels of your organisation?

33. To what extent have the employees in your organisation been abusing the affirmative action system in your company by means of job-hopping?

34. To what extent has affirmative action been accepted by the majority of the employees throughout your organisation without any complications?

Annexure C

THE IMPACT OF GLOBAL FORCES ON THE BUSINESS ENVIRONMENT:

The information gathered by this questionnaire is for research purposes only and no individual or organisation will be compromised in any way. No South African organisation or individual will be identified in the final report. For South African organisations with global attachments (branches), this questionnaire must be seen from a global point of view.

Section E: Organisational work design
<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent has the environment influenced your current methods of work design?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To what extent does your current work design satisfy the needs of the external environment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To what extent does your current work design make it possible for your organisation to be globally competitive?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To what extent are the employees with in your organisation aware of their contribution to the organisation as a whole?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To what extent does your HR system provide guidance and direction to facilitate organisational optimisation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. To what extent does your organisation utilise its workforce’s skills and abilities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. To what extent do the current work designs take the employees’ needs into account?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. To what extent does your organisation do job analysis?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. To what extent does your organisation’s job descriptions adequately define the work performed by the employees?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How often does your organisation perform job analysis exercises?

<table>
<thead>
<tr>
<th>Never</th>
<th>Less than Annually</th>
<th>Annually</th>
<th>Six - Monthly</th>
<th>Monthly</th>
</tr>
</thead>
</table>

Annexure C

11. How often does your organisation update the job descriptions?

<table>
<thead>
<tr>
<th>Never</th>
<th>Only done for new jobs.</th>
<th>Less than Annually</th>
<th>Annually</th>
<th>Six - Monthly</th>
</tr>
</thead>
</table>

12. To what extent does your organisation’s job specifications adequately represent the
13. To what extent does your current work design define the job requirements?

14. To what extent does your organisation make use of the following job analysis techniques?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-on-one interviewing.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Behavioural event interviews.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing a Curriculum (DACUM).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural review.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job analysis at the speed of reality.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Do the job analysis methods that are being used yield the required results?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Annexure C

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. To what extent is your HR department qualified to perform job analysis exercises?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. To what extent are the jobs within your organisation broken down into simple, repetitive tasks?</td>
<td></td>
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</tr>
<tr>
<td>18. To what extent is the creativeness and flexibility of the employees utilised to maximum potential within the organisation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. To what extent do your job design methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Not at all</td>
<td>Small extent</td>
<td>Large extent</td>
<td>Completely</td>
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<tr>
<td>------------------------------------------------------------------------</td>
<td>------------</td>
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<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>20. To what extent do your job design methods focus on customer service?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. To what extent does your organisation empower employees to make work-related decisions?</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>22. To what extent do your job design methods focus on the quality of the product?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Does your organisation have an acceptable absenteeism rate?</td>
<td>YES</td>
<td></td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>24. To what extent do your current job designs influence the following human factors in a positive way?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. To what extent does your organisation make use of job rotation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. To what extent does your organisation make use of job enlargement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. To what extent does your organisation make use of job enrichment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Does your organisation utilise job rotation as a training tool?</td>
<td>N/A</td>
<td></td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>29. Has job enrichment improved teamwork and communication within the areas it has been implemented?</td>
<td>N/A</td>
<td></td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>30. If you do make use of job enrichment, to what extent do you address the following factors?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annexure C
<table>
<thead>
<tr>
<th>Factors</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct feedback in the form of performance evaluation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allow employees to schedule their own time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee control over company resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal accountability given for their job areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. To what extent does your organisation make use of specialisation intensive jobs? (Jobs that have few tasks and are often repeated during a workday. – production line)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. If you do make use of job specialisation, to what extent does it satisfy your organisational needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. To what extent does your organisation make use of work teams?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

34. Have any of the teams reached the stage where they exist as self-managed work teams or autonomous work groups?  
N/A | YES | NO |

Annexure C

35. To what extent are the following work design options utilised within your organisation and?

<table>
<thead>
<tr>
<th>Job characteristic</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed work weeks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecommuting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flex time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
36. Which of the following job characteristics are utilised within your organisation and to what extent?

<table>
<thead>
<tr>
<th>Job characteristic</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill variety.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task identity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task significance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annexure C

**Section F: Organisational structures:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>More than average</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent does your organisation meet the needs and demands of your customer base?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To what extent does your current organisational structure make it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
possible for your customer requirements being met?

3. To what extent do your organisational objectives clearly state the bases for the division of and grouping of duties into sub-units?

4. To what extent has your current strategy influenced your organisational structure?

5. To what extent have you considered the following main areas during the design of your organisational structure?

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Small extent</th>
<th>More than average</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialisation of jobs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delegation of authority.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Span of control</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

6. If you do make use of some degree of specialisation within your organisation, does it tend to be more scientific management or craftsmanship?

<table>
<thead>
<tr>
<th>N/A</th>
<th>More Scientific</th>
<th>50% mix</th>
<th>More</th>
<th>Craftsmanship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. If you do make use of “Departmentalisation” within your organisation, please indicate the type from the categories below. (Tick only one)

<table>
<thead>
<tr>
<th>Type of “Departmentalisation”</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed departmentalisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annexure C

<table>
<thead>
<tr>
<th>To what extent does your organisational structure fulfil the following objectives?</th>
<th>Not at all</th>
<th>Small extent</th>
<th>Large extent</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Optimisation of the organisation’s recourse utilisation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Stipulates accountability for the work done by all the employees of the organisation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Co-ordination of all the activities within the organisation.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>11. Attend to the social satisfaction the employees working for the organisation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. Establishes the direction of the flow of information within the organisation.

13. Flexibility to respond rapidly to future demands and developments caused by evolving environmental influences.

14. Which of the following types of structures are utilised within your organisation?

<table>
<thead>
<tr>
<th>Type of organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic organisation</td>
</tr>
<tr>
<td>Mechanistic organisation</td>
</tr>
<tr>
<td>Mix of both “Organic” and “Mechanistic”</td>
</tr>
<tr>
<td>Matrix organisation</td>
</tr>
<tr>
<td>Network organisation</td>
</tr>
<tr>
<td>Multidivisional organisation</td>
</tr>
</tbody>
</table>

15. If you do make use of a “Network structure” within your organisation, please indicate the type from the categories below. (Tick only one)

<table>
<thead>
<tr>
<th>Type of “Network structure”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spider web</td>
</tr>
<tr>
<td>Shamrock</td>
</tr>
<tr>
<td>Virtual organisation</td>
</tr>
</tbody>
</table>