Part Three – Methodology

TABLE OF CONTENTS

1. OBJECTIVES ................................................................. 76

2. METHODOLOGY .................................................................. 78

3. THE BUSINESS ENGINEERING APPROACH .......................... 79

4. BUSINESS ANALYSIS ...................................................... 80

   4.1. Define current portfolio .................................................. 81

   4.2. Analysing Current Business Portfolio ............................... 83

   4.3. External environmental analysis ...................................... 85

      4.3.1. Institutional context ................................................ 85

   4.4. Business environmental analysis .................................... 90

      4.4.1. Industry analysis .................................................... 91

      4.4.2. Industrial economic factors ...................................... 91

      4.4.3. Industry attractiveness ............................................ 92

      4.4.4. Competitive position ............................................... 92

      4.4.5. Value chain analysis ............................................... 93

      4.4.6. Transactional and administrative costs ....................... 95

      4.4.7. Competitive conditions ........................................... 96

   4.5. Internal environmental analysis .................................... 98

      4.5.1. Stakeholder Requirements ....................................... 98

      4.5.2. Value creation ..................................................... 102

      4.5.3. The organisation’s core processes and competencies .... 104
4.3.4. The organisation’s resources ................................................................. 105

4.6. Analysis techniques ......................................................................................... 106

5. BUSINESS DESIGN ......................................................................................... 107

5.1. Apply Design Methodology ........................................................................... 108

5.2. Define future portfolio ................................................................................... 111

5.3. Define strategy .................................................................................................. 113

5.3.1. Strategic actions .......................................................................................... 113

5.3.2. Resource allocation ...................................................................................... 117

6. BUSINESS TRANSFORMATION ....................................................................... 118

7. CONCLUSION ..................................................................................................... 120

8. REFERENCES ..................................................................................................... 121
LIST OF TABLES

Table 4-1: How institutional context drives strategy ................................................................. 87

LIST OF FIGURES

Figure 2-1: Methodology ............................................................................................................. 78
Figure 3-1: Diversification and Refocusing Methodology .......................................................... 79
Figure 4-1: Business analysis phase .......................................................................................... 80
Figure 4-2: Scope Matrix .......................................................................................................... 81
Figure 4-3: ABC (Pty) portfolio scope ....................................................................................... 82
Figure 4-4: Business analysis process ....................................................................................... 83
Figure 4-5 - Porter’s value chain .............................................................................................. 93
Figure 4-6 - Adapted value chain model .................................................................................. 95
Figure 4-7 - Five forces model .................................................................................................. 96
Figure 4-8: The Corporate Model .............................................................................................. 99
Figure 4-9: Corporate Model skills .......................................................................................... 100
Figure 4-10: Corporate Head office involvement ..................................................................... 101
Figure 4-11: Stakeholder value ................................................................................................. 101
Figure 4-12 - Competency levels ............................................................................................. 105
Figure 5-1 - The design process ............................................................................................... 107
Figure 5-2: Design phase of methodology ............................................................................... 108
Figure 5-3: Design Methodology .............................................................................................. 108
Figure 5-4: Future ABC (Pty) Portfolio .................................................................................... 112
Figure 5-5: Alternative Strategies ............................................................................................. 113
“If we can know where we are and something about how we got there, we might see where we are trending – and if the outcomes which lie naturally in our course are unacceptable, to make timely change.”

Abraham Lincoln

1. Objectives

Part Two introduces the fundamentals of the Business Engineering theory that will be the framework for addressing the business transformational problem of diversification and refocusing from an engineering perspective. It also provides a literary overview of strategic concepts, diversification and refocusing fundamentals as well as commonly used portfolio evaluation techniques.

Part One introduces the objectives of this dissertation (Why?).
Part Two defines the fundamentals of the dissertation (What?).
Part Three describes the methodology of the dissertation (How?).
Part Three introduces the methodology for addressing the business transformation problem of diversification and refocusing from an engineering perspective. This methodology is deduced from fundamental principles and finally the Business Engineering theory is applied. The methodology is described in the context of:

- Business Analysis
- Business Design
- Business Transformation
2. Methodology

A diversification and refocusing methodology is proposed, based on a process of chronological steps that starts by defining an organisation’s current portfolio and then analysing its business units so as to determine their contribution towards long-term performance of the organisation and also their influence on the stakeholders requirements. After completion of these analyses a thorough understanding of the organisation’s current reality can be made. A desired future portfolio is designed, with the aim of ensuring maximum stakeholder value, by applying the design methodology as guideline. Correlating strategic actions are defined that will enable the organisation to achieve the desired portfolio and to steer corporate resources into the most attractive strategic opportunities. The final step of the methodology aims at successfully implementing the new portfolio. The proposed methodology can be illustrated as in Figure 2-1.

![Diagram](image)

*Figure 2-1: Methodology*
3. The Business Engineering approach

When the methodology, as described in paragraph 2 of this chapter, is combined with the Business Engineering process, as described in the previous chapter, an integrated process can be proposed, as illustrated in Figure 3-1.

*Figure 3-1: Integrated Diversification and Refocusing Methodology*
4. Business Analysis

"I keep six honest men (They taught me all I know); Their names are What and Why and When; And How and Where and Who."

Rudyard Kipling

The proposed analysis phase of the Diversification and Refocusing Methodology is based on two steps as illustrated in Figure 4-1.

![Figure 4-1: Business analysis phase](image)

The first step of the Business Analysis phase is aimed at defining the current scope of an organisation’s portfolio and the second step is concerned with analysing this portfolio and its environment, so as to develop an understanding of the current reality of the portfolio.
4.1. Define current portfolio

The scope of an organisation’s portfolio can be defined, based on [Grant: 3]:

- The range of products or commodities that the organisation’s Strategic Business Units produce.
- The geographical distribution of the organisation’s Strategic Business Units (local, regional, national or global).
- As well as the extent to which the Strategic Business Units are forward or backward integrated.

To visually illustrate the scope of an organisation’s Business Units three axes, as indicated in Figure 4-2, are recommended.

![Scope Axes](image-url)
As example, an imaginary organisation’s scope will be defined according to the three scope axes. The imaginary organisation’s portfolio is illustrated on the scope axes in Figure 4-3.

![Figure 4-3: ABC (Pty) portfolio scope](image)

An imaginary organisation, *ABC (Pty)*, has two Strategic Business Units, *ABC Metals*, that is a national, integrated mining and smelting company, and *ABC Aluminium*, that is a local aluminium smelting company.

*ABC Metals* is vertically integrated from mining to smelting in three products / commodities; namely Copper, Zinc and Iron Ore. *ABC Metals’* products are geographically distributed locally and nationally, but not internationally.

*ABC Aluminium* is not vertically integrated and is only in the smelting industry. It also has only one product / commodity and that is Aluminium. *ABC Aluminium* is located locally and produces only for the local market.
The two Strategic Business Units are related based on their geographical location (locally), their smelting capabilities and also due to the fact that they are commodity based.

4.2. Analysing Current Business Portfolio

The business analysis approach of the Business Engineering process will be adopted to analyse the current business portfolio. This approach is viewed as the process through which a thorough understanding is formed of the current reality of an organisation and is thus relevant. This process, as proposed by Moll [6], is shown in Figure 4-4.

![Figure 4-4: Business analysis process](image)

Moll [6] elaborately defined the Business Analyses approach. Only specific elements, which may be defined in more detail or are necessary to ensure a line of thought, will be discussed in this dissertation. These elements, that will be discussed, are:

**External Environmental Analysis**

- Strategic importance, other than core business based on Institutional Context.
Business Environmental Analysis

- Profitable growth potential in current business (industry):
  - Industry analysis;
  - Industry attractiveness; and
  - Competitive position.

- Potential for vertical integration or Co-operation potential:
  - Value chain analysis; and
  - Transactional and administrative costs.

- Competitive conditions:
  - The Five forces model.

Internal Environmental Analysis

- Stakeholders requirements.

- Value creation of Strategic Business Units related to cost of capital.

- Fit with core business:
  - Resources and capability analysis.

- Restructuring potential.
4.3. External environmental analysis

The external environment is defined as the macro system of which an organisation is a part. It is either an integral part of the macro system, or it plays a supportive role in the macro system [Thompson: 14].

In analysing the external environment, a number of generic elements should be investigated; namely political environment, economic environment, social environment, technological environment and the global environment [Moll:6].

In this dissertation specific focus will be on the Institutional context so as to understand a Business Unit’s strategic importance, other than core business. It is also important to analyse and understand the other elements as indicated above, these elements will not be discussed in this dissertation.

4.3.1. Institutional context

Part of a major project that Khanna and Paleo [4] conducted to investigate corporate strategy in emerging markets indicated the following. By analysing the institutional context of a country it would be possible to determine strategically important business units, to be included into the organisations portfolio, essential for conducting business, but that does not comply to the core business definition.
Core competencies and focus are now the mantas of corporate strategists in the Western economies. But while managers in the West have dismantled many conglomerates assembled in the 1960’s and 1970’s, the large, diversified business group remain the dominant form of enterprise throughout most emerging markets.

Without effective securities regulation and venture capital firms, focused companies may be unable to raise adequate financing, and without strong educational institutions they will struggle to hire skilled employees.

Although a focused strategy may enable a company to perform a few activities well, companies in emerging markets must take responsibility for a wide range of functions in order to do business effectively. As a result companies must adapt their strategies to fit their institutional context – a country’s:

- Product market;
- capital market;
- labour markets;
- its regulatory system; and
- its mechanics to enforce contracts.

How institutional context drives strategy is illustrated in Table 4-1.
### How Institutional Context Drives Strategy

<table>
<thead>
<tr>
<th>Institutional Dimensions</th>
<th>United States</th>
<th>Japan</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Markets</td>
<td>Equity-focused; monitoring by disclosure rules and the market for corporate control</td>
<td>Bank-focused; monitoring by interlocking investments and directors</td>
<td>Underdeveloped, illiquid equity markets and nationalised banks; weak monitoring by bureaucrats</td>
</tr>
<tr>
<td>Labour Markets</td>
<td>Many business schools and consulting firms offering talent; certified skills enhance mobility</td>
<td>Few business schools; training internal to companies; company-specific development of talents</td>
<td>Few business schools and little training; management talent scarce</td>
</tr>
<tr>
<td>Product Markets</td>
<td>Reliable enforcement of liability laws; efficient dissemination of information; many activist consumers</td>
<td>Reliable enforcement of liability laws; efficient dissemination of information; some activist consumers</td>
<td>Limited enforcement of liability laws; little dissemination of information; few activist customers</td>
</tr>
<tr>
<td>Government regulations</td>
<td>Low; relatively free of corruption</td>
<td>Moderate; relatively free of corruption</td>
<td>High; corruption common</td>
</tr>
<tr>
<td>Contract enforcement</td>
<td>Predictable</td>
<td>Predictable</td>
<td>Unpredictable</td>
</tr>
<tr>
<td>Result</td>
<td>Diversified groups have many disadvantages</td>
<td>Diversified groups have some advantages</td>
<td>Diversified groups have many advantages</td>
</tr>
</tbody>
</table>

*Table 4-1: How institutional context drives strategy.*

It is this difference in institutional context that explains the success of large, diversified corporations in developing economies such as Indonesia and India and their failure in advanced economies such as the United States and the United Kingdom. In their [Khanna and Paleo: 4] research they found that highly diversified business groups can be particularly well suited to the institutional context of most developing countries. These conglomerates can add value by imitating the functions of several institutions that are present only in advance economies. Successful groups effectively mediate between their member companies and the rest of the economy.
Most analysts define an emerging market according to such characteristics as size, growth rate or how recently it has opened up to the global economy. In their view the most important criterion is how well an economy helps buyers and sellers come together. Ideally every economy would provide a range of institutions in order to facilitate the functioning of markets, but developing countries fall short in a number of ways.

They defined three main sources of market failure [Khanna and Paley: 4]:

- **Information problems** – Buyers, broadly defined not only as consumers in product markets but also as employers in labour markets and investors in financial markets, need reliable information to assess the goods and services that they purchase and the investments that they make. Without adequate information they are reluctant to do business.

- **Misguided regulations** – When regulators place political goals over economic efficiency, they can distort the functioning of markets. Many emerging markets, for example, restrict the ability of companies to lay off workers. These rules do add some stability in society and in some cases they may even be intended to overcome market failure from other sources. However, the result of this is that companies are less able to take advantage of opportunities than they are in advanced economies.

- **Inefficient Judicial System** – Companies are reluctant to do business without ways of ensuring that their partners will hold up to their end of the bargain. Contracts can facilitate co-operation by aligning the incentives of the different parties. Markets therefore depend on judicial systems that are strong enough to enforce contracts in a reliable and predicted way.
In advanced economies companies can rely on a variety of outside institutions that minimise these sources of market failure. In such a context, companies create value primarily by focusing on a narrow set of activities. At the opposite extreme, stagnant or declining economies usually suffer from near-complete market failure because of the utter absence of basic institutions.

Emerging markets in the middle of the continuum offer the prospect of substantial growth because they have developed at least some of the institutions necessary to encourage commerce. But institutional voids are still common enough to cause market failure. As a result companies in emerging markets often have to perform these basic functions themselves. In their [Khanna and Paley: 4] view that is the crucial distinction between doing business in an emerging market and operating in an advanced economy.
4.4. Business environmental analysis

The business or task environment is defined as the level of operation at which a specific organisation interacts with its environment, consisting of a description of the input, processes and output of the system, and the inherent attributes that influence this operation [Thompson: 14].

In viewing an organisation as a system, the analysis process is focused on the stakeholders requirements, value creation, value chain, industry, markets and competitive forces that affect the organisation [Moll: 6]. This dissertation will specifically focus on analysing the following elements:

- Profitable growth potential in current business (industry):
  - Industry analysis;
  - Industry economic factors;
  - Industry attractiveness; and
  - Competitive position.
- Potential for vertical integration or Co-operation potential:
  - Value chain analysis; and
  - Transactional and administrative costs.
- Competitive conditions:
  - The Five forces model.
4.4.1. Industry analysis

An industry is a collection of organisations that propose to satisfy similar client/customer requirements [Porter: 7].

When analysing an industry, the following factors are evaluated:

- The boundaries of the industry;
- the structure of the industry;
- the nature of competition; and
- trends within the industry.

4.4.2. Industrial economic factors

Globally and nationally, factors often exist that influence the state of a whole industry. General trends in these factors are often cyclical and an understanding is required of the cyclical nature of demand patterns and those factors influencing demand and supply in the industry. It is of value to model these cycles and forecast their future patterns [Moll: 6].

By analysing the industrial economic factors an overall understanding of the current or potential industry can be gained. This includes current industry profitability and growth potential as well as determining if a potential industry would be conducive to long-term profitability.
4.4.3. Industry attractiveness

According to Grant [3] industry attractiveness is computed on the basis of the following factors:

- Market size;
- Market growth (real growth rate over 10 years);
- Industry profitability (3-year average return on sales of the business and its competitors);
- Cyclicality (average annual percent trend deviation of sales);
- Inflation recovery (ability to cover cost increases by higher productivity and increased prices); and
- Importance of overseas markets (ratio of international to national markets).

4.4.4. Competitive position

Strategic Business Unit's competitive position is computed on the basis of the following variables [Grant 3]:

- Market position (as indicated by share of the national / international market and market share relative to that of leading competitors);
- Competitive position (superior, equal or inferior to competitors) with regard to quality, technology, manufacturing, distribution, marketing and cost; and
- Return on sales relative to that of leading competitors.
4.4.5. Value chain analysis

The value chain of an organisation is a means of understanding the processes required for creating value and satisfying stakeholder requirements [Porter:7].

Porter [7,8,9] proposes the concept of a value chain as a way of understanding the value creation within an organisation. A generic value chain underlies any organisation, this value chain does not necessarily start and end within the boundaries of an organisation because an organisation can outsource elements of the value chain or might merely be a player in a larger value stream. Modelling the value chain of an organisation also contributes by indicating a clear distinction between activities that directly contribute towards business output, and those that indirectly contribute. The collection of activities that directly contribute to business output is called the primary business process while the collection of activities that indirectly contribute is called the secondary business processes.

The generic Porter value chain is shown in Figure 4-5.

![Figure 4-5 - Porter's value chain](image-url)
The importance of this value chain does not merely lie in its content, but rather in the thought process that is demonstrated by it. The following basic definitions are applied in the value chain:

- A primary business process (core process) is directly committed to the creation of business output for the primary stakeholders (owners and customers) – its focus is effectiveness;

- a secondary business process (support process) is indirectly involved and act as the custodians of the various business resources (production factors) – its focus is efficiency;

- a primary business process generates direct cost and corresponding value; and

- a secondary business process generates indirect cost and value.

In order to model the primary process of the value chain, the view of the primary stakeholders is taken and the process is defined by which their requirements are met. In order to model the secondary processes, the corresponding views of all the other stakeholders are taken into account and the processes are modelled through which the requirements of these stakeholders are satisfied.

A simplified version of Porter’s model is shown in Figure 4-6 [Moll: 6].
4.4.6. Transactional and administrative costs

According to Coarse [1] relative cost is what determines which activities in a value stream / chain are undertaken within the firm, between individuals or between firms. If the transactional costs associated with organising across markets are greater than the administrative costs of organising within a firm, it can be expected that the co-ordination of a productive activity be internalised within the firm.

Transactional costs relate to the market mechanism where individuals and firms make independent decisions that are guided and co-ordinated by market price. Administrative costs relate to the administrative mechanics of firms where managers make decisions over production, supply and purchasing of inputs.
4.4.7. Competitive conditions

Competitive forces shape the playing field within an industry. Porter [7] suggests the Five Forces model as a means of understanding competitiveness. The Five Forces model is shown in Figure 4-7.

![Five Forces model](image)

Figure 4-7 - Five forces model

In short, the model requires an understanding of the following factors:

- The market needs that are being satisfied by a particular organisation and the products on offer;
- existing competitors and the rivalry between them;
- potential competitive threats to the industry as a whole;
- potential substitutes to the industry as a whole;
- the nature of the customers (downstream system) of the industry with an emphasis on the collective power of the all the businesses in the industry to influence or expand the market;
- the nature of the supplier base (upstream system) of the industry; and
- barriers to entry into the existing business system set for/by an organisation.
Sassenberg [12] describes analysing the competitiveness within the industry specifically to understand the levels of competitiveness of an organisation as a hierarchy.

- **Capital** – competitiveness that is based upon having more capital than the competitors;

- **Skill** – competitiveness that is based upon being on equal terms with the competition with capital but having better skills and competencies than the competition;

- **Speed** – competitiveness that is based upon being on equal terms with the competition with skill but having a better responsive ability than the competition; and

- **Psychological robustness** – competitiveness that is based upon being on equal terms with the competition with responsiveness but having a bigger desire to achieve the proposed results.
4.5. Internal environmental analysis

The internal environment is defined as the set of subsystems that collectively serve as a system [Thompson: 14].

An organisation consists of various elements or subsystems that can influence its course significantly. These are the determinants of the internal environment of an organisation [Moll: 6]. Elements that will be analysed in this dissertation are:

- Stakeholders requirements.
- Value creation of Strategic Business Units related to cost of capital.
- Fit with core business:
  - Resources and capability analysis.

4.5.1. Stakeholder Requirements

Through close collaboration with colleagues three requirements set by stakeholders were identified that affects organisational diversification and refocusing. These requirements relate to:

- Shareholders ownership;
- operational influence; and
- stakeholder value.
The Corporate model

The corporate model of an organisation relates to the stakeholders' requirements regarding ownership and operational influence and the fit between these requirements and specific skills that the organisation has. This can be illustrated as in Figure 4-8.

![Diagram showing the corporate model with axes for ownership and operational influence, categorizing roles such as portfolio manager, integration manager, non-core, and operator.]

Figure 4-8: The Corporate Model

In respect of these two dimensions, ownership and operational influence, three alternatives exist:

- A **portfolio manager** approach with primary focus on ownership of investments. Its core skills and processes are portfolio management related.

- An **operator** approach with primary focus on operations, which on a secondary level might imply ownership of certain facilities. Its core skills and processes are operational.
- An **integration manager** approach focusing on the synergies between individual assets. Its core skills and processes are the integration of these assets.

High level skills required, by the three corporate model alternatives, are as illustrated in Figure 4-9.

![Figure 4-9: Corporate Model skills](image)

The dynamics of the corporate model are:

- In order to move from an **operator to an integration manager** approach, a company has to increase its shareholding, focus more on synergies than operations and develop its integration skills.

- In order to move from an **integration manager to a portfolio manager** approach, a company has to focus more on investing than integration and develop its portfolio management skills.
Involvement of the corporate head office with the business units can be illustrated in Figure 4-10. This figure also indicates examples within South Africa.

![Figure 4-10: Corporate Head office involvement](image)

**Figure 4-10: Corporate Head office involvement**

**Stakeholder value**

Stakeholders' requirements regarding value creation may be illustrated as in Figure 4-11.

![Figure 4-11: Stakeholder value](image)

**Figure 4-11: Stakeholder value**
Stakeholders’ value may be defined in relation to the specific stakeholder. There can broadly be distinguished between two stakeholders and related values:

- Shareholders value - Share price
- Primary stakeholders - Financial value of the organisation

(Example – Net present value – NPV)

4.5.2. Value creation

The ultimate aim of an organisation is to create value. In analysing the success of any business system, the first and foremost element to be addressed is therefore the amount of value it creates.

According to Moll [6], value creation has four generic components namely:

- Financial value created in the long-term;
- financial value created in the short-term;
- non-financial value created in the long-term; and
- non-financial value created in the short-term.

The main drive why shareholders or creditors would invest in a business or venture is based on their expected compensation for the opportunity cost of their invested funds. This investment in a specific business is based on the expected compensation as well as the associated risk of this particular investment. The weighted average cost of capital is the discounted rate, or time value of money, used to convert expected future cash flows into present
value for all the investors. In developing an average cost of capital it is important to be consistent with the overall valuation approach and with the definition of the cash flow to be discounted. To be consistent the estimate of the cost of capital must [Copeland: 1]:

- Comprise a weighted average of the marginal cost of all sources of capital (debt, equity and so on) since the free cash flow represents cash available to all providers of capital.
- Be computed after corporate taxes, since the free cash flow is stated after taxes.
- Use nominal rates of return built up from real rates and expected inflation, because the expected free cash flow is expressed in nominal terms.
- Adjust for the systematic risk borne by each provider of capital, since each exerts a return that compensates for the risk taken.
- Employ market value weights for each financial element, because market value reflect the true economic claim of each type of financing outstanding, whereas book values usually do not.
- Is subject to change across the cash flow forecast period, because of expected changes in inflation, systematic risk or capital structure.

The result of such a financial measure is an indication of whether funds should be invested in other businesses, business units or ventures with a higher expected compensation.
4.5.3. The organisation’s core processes and competencies

Core competencies are those fundamental skills that an organisation possesses that are world class [Prahalad and Hamel: 10,11, Stalk, Evans and Schulman: 13].

Martin [5] defines core competencies as exceptional skill with a critical resource or technology that can be applied to a multiple of products.

A more complete definition would be [Moll: 6]:

- The mastery of a specific skill or resource;
- which can be applied to a number of products or services; and
- can not be imitated.

Moll [6] classifies competencies in four levels, namely:

- Unconscious incompetence;
- consciousness incompetence;
- conconscious competence; and
- unconscious competence.

These competency levels are shown in Figure 4-12.
The latter of these (unconscious competence) should be examined for possible current core competencies, whilst the others may lead to possible areas where competencies have to be formed.

The identification of core competencies leads to their exploitation and elimination of areas where core competencies do not exist. An organisation must evaluate its process in order to determine its core competencies and should determine the resources available for these competencies in order to determine the capability that corresponds with these competencies.

4.5.4. The organisation's resources

An active organisation is a system that receives input and transforms this input into output. This implies that this input, or resources that the organisation requires, are also determinants of the internal environment [Moll: 6].
These resources are:

- Natural resources based on raw material, land and energy sources;
- capital resources based on financial resources and capital equipment; and
- knowledge resources based on information, technology and intellectual capital.

The availability of these resources has a significant impact on the performance of an organisation. They are analysed by an assessment of the organisation's requirements for each compared to the actual situation.

4.6. Analysis techniques

This dissertation will not elaborate on the different techniques required to analyse the above mentioned elements. Various techniques exist and should be used appropriately. Special reference can be made to Moll [6] and Porter [7] that describe relevant techniques.
5. Business Design

"Cheshire Puss" she [Alice] began... "would you please tell me which way I ought to go from here?"

"That depends on where you want to get to", said the cat.

Lewis Carroll

Moll [6] defines Business Design as being concerned with the definition of the future intent of an organisation. Design is the process and architecture is the output. The input for this process is some form of requirement or specification that was compiled through the analysis of a system. This approach is shown in Figure 5-1.

![Figure 5-1 - The design process](image)

The business design phase of this methodology obtains inputs from the analysis phase and by applying the design methodology (as guideline) to these inputs a future portfolio can be defined. Correlating strategic actions are also defined. The process can be illustrated as in Figure 5-2.
5.1. Apply Design Methodology

A design methodology, as illustrated in Figure 5-3, is proposed that can be used as a *guideline* in designing and defining a future portfolio. This methodology should only be used as a guideline as this can not replace creativity that is required in the architectural design of the portfolio.
Five broad areas are defined within the methodology.

Co-operation agreements, Alliances and Joint Ventures

An organisation should establish a co-operation agreement with a relevant establishment in order to obtain the specific resources / capabilities or elements required to become profitable, without losing the specific unit. This should be done if Strategic Business Units or parts of their value chains / streams are:

- Of strategic importance or part of the organisation’s core business; and
- not earning more than their cost of capital; and
- that can not be improved internally.

Refocusing

The second area intends to reduce the scope of the organisation, through refocusing (liquidation, divesting, selling, downscaling, etc.) the business units that are:

- Not earning more than its cost of capital; and
- may or may not be of strategic importance or core business; and
- can not be improved in any way (Internally or through co-operation).
Internal investment and Vertical integration

Internal investments and vertical integration (via mergers, acquisitions and Joint Ventures) should be evaluated as a growth option when the Strategic Business Units are:

- Earning more than their cost of capital; and
- fits with the organisation’s core business or of strategic importance; and
- growth opportunities exist within their industries.

"Cash cow"

A typical cash cow approach, as described by the Boston Consulting Group, should be adopted by Strategic Business Units when they are:

- Earning more than their cost of capital; and
- are core business or of strategic importance; and
- further growth is not possible or desirable.

Diversification

Diversification becomes a strategic necessity when Strategic Business Units are:

- Earning more than their cost of capital;
- core business or of strategic importance;
- further growth in current industry is not possible; but
- further growth is desirable.
5.2. Define future portfolio

By applying the design methodology as guideline and by using creative thinking, a more appropriate future portfolio can be designed. The future portfolio should be designed, based on the three scope axes as defined in Figure 4-2. These axes are geography, vertical integration and product/commodity.

As example the same imaginary portfolio as illustrated in Figure 4-3 will be discussed. The future portfolio differs from the old portfolio in the following ways.

ABC (Pty)’s future portfolio will include an ABC Metals Strategic Business Unit, that has grown to include international markets and a new Strategic Business Unit named ABC Coal, that will be focused on the national coal transport industry. ABC Aluminium will not be included into the future portfolio, due to consistent weak financial performance. The future portfolio is illustrated in Figure 5-4.
**ABC Aluminium**

Due to consistent weak financial performance and various failed attempts to improve the Strategic Business Unit through internal restructuring and cooperation attempts, it was decided to remove *ABC Aluminium* from ABC (Pty)'s portfolio.

**ABC Metals**

Excellent financial returns and an international industry conducive to profitable growth ensured *ABC Metals* a position in the future portfolio of ABC (Pty).

**ABC Coal**

A pure financial opportunity emerged in the international coal logistics industry, this opportunity will be utilised by ABC (Pty) through including a Strategic Business Unit (*ABC Coal*) into its future portfolio.
5.3. Define strategy

Defining strategic actions includes:

- Strategic actions; and
- resources allocation.

5.3.1. Strategic actions

Strategic actions can broadly be defined in five areas, namely vertical integration, diversification, internal growth, restructuring and refocusing. An adapted version of Thompson’s [14] potential strategic actions are illustrated in Figure 5-5 to indicate the most commonly used strategic alternatives in these areas.

*Figure 5-5: Alternative Strategies*
Figure 5-5 also indicates the typical transition from a single business concentration to the organisational state. A great deal of creativity is required in order to define the most appropriate combination of strategic actions in order to move from the current portfolio towards the future portfolio.

**Vertical integration**

Vertical integration is aimed at increasing the organisational scope through increasing the organisation’s ownership and control over vertically related activities in successive stages of the value chain. Typical vertical integration strategies relate to:

- Acquisitions of upstream or downstream companies;
- Joint Ventures with upstream or downstream companies; and
- Starting a company in-house and growing it from within.

Grant [3] identifies other possible vertical relationships as:

- Long-term contracts;
- Franchises;
- Agency agreements;
- Spot contracts;
- Supplier / buyer partnerships; and
- Informal supplier / customer relationships.
Internal growth, restructuring and refocusing

Internal growth, restructuring and refocusing are concerned with increasing or reducing the current portfolio scope. This can be achieved through the following strategic actions:

Internal growth to increase the current portfolio scope, can be achieved through:

- Acquisitions;
- Mergers; and
- Joint Ventures.

Typical refocusing strategies, to reduce the current portfolio scope, are:

- Divestiture;
- Liquidation;
- Downsizing;
- Retrenchment;
- Delayering;
- Sell-offs
- Spin-offs; and
- Leverage buy-outs.
Diversification

Diversification is concerned with increasing the portfolio scope through external growth. The three alternative strategic possibilities are:

- Related diversification;
- Unrelated diversification; and
- A combination of the above.

Related diversification does not add value, just through diversifying the company's risk by investing in more than one industry, unless a group of businesses perform better under a single corporate umbrella than they would perform operating as independent, stand alone businesses. The rational are to diversify into businesses with strategic fit, capitalise on strategic fit relationship to gain competitive advantage, then use competitive advantage to achieve the desired 2+2=5 impact on stakeholder value. Typical related diversification strategies relates to:

- Acquisitions of related companies;
- Joint Ventures with related companies; and
- Starting a company in-house and growing it from within.

The reason for diversification into unrelated businesses hinge almost exclusively on opportunities for attractive financial gain – there in nothing strategic about unrelated diversification. Typical unrelated diversification strategies relate to:
Acquisitions of unrelated companies;

Joint Ventures with unrelated companies; and

Starting a company in-house and growing it from within.

5.3.2. Resource allocation

"No company can afford everything it would like to do. Resources have to be allocated. The essence of strategic planning is to allocate resources to those areas that have the greatest future potential."

Reginald Jones

Corporate strategy has the objective of steering corporate resources into the most attractive strategic opportunity. Resources requirements from the Strategic Business Units should be addressed by allocating resources according to financial and strategic considerations. A multidivisional organisation can achieve this through operating a competitive internal capital market where budgets are linked to past and projected divisional profitability. Individual projects are subject to a standardised appraisal and approval process. The extent and quality of information that is available within the organisation enhance the efficiency of this process.
6. Business Transformation

“Weak leadership can wreck the soundest strategy; forceful execution of even a poor plan can often bring victory.”

Sun Zi

Moll [6] defines business transformation as being concerned with the implementation of the proposed architecture. Putting the strategy into effect and getting the organisation moving in the chosen direction call for a different set of managerial tasks and skills. Where as crafting strategy is largely an entrepreneurial activity, implementing strategy is largely an internal administrative activity. Whereas successful strategy formulation depends on business vision, market analysis and entrepreneurial judgement, successful implementation depends on working through others, organising, motivating, culture building and creating strong fit between strategy and how the organisation does things. Ingrained behaviour does not change just because a new strategy has been announced. Successfully implementation of the desired strategy requires addressing the following main aspects:

- Defining an implementation plan;
- measuring performance against the plan; and
- creating a series of strategic supportive “fits”.
Although strategy implementation is a critical part of organisational transformation, this dissertation will not elaborate on the specific administrative actions required for successful implementation. However, it will broadly discuss guidelines to creating strategic supportive “fits”.

The motivational and inspirational challenge is to build such determined commitment up and down the ranks that an enthusiastic organisation-wide crusade emerges to carry out the strategy and meet performance targets. Along with enthusiasm and strategic commitment, must come an unified managerial effort to create a series of strategic supportive “fits”. These supportive “fits” can be summarised as [Thompson: 14]:

- The internal organisational structure must be matched to the strategy.
- The necessary organisational skills and capabilities must be developed.
- Resource and budget allocation must support the strategy.
- The organisation’s reward structures, policies, information systems and operating practices all need to reinforce the push for effective strategy execution, as opposed to having a passive role or even acting as obstacles.
- Managers must do things in a manner and style that creates and nurtures a strategic supportive work environment and corporate culture.

The stronger the strategic supportive “fits” created internally, the greater the chances of successful implementation.
7. Conclusion

Part Two discusses the fundamentals of the Business Engineering theory, diversification, refocusing, strategic concepts as well as commonly used portfolio evaluation techniques. These fundamentals are essential in order to understand the interrelationship and hence be able to develop an engineering orientated methodology to address the question of diversification and refocusing.

Part Three describes the methodology to guide and evaluate a diversification or refocusing strategic decision. This methodology is incorporated into the Business Engineering process.
8. References


Part Four – Conclusion

TABLE OF CONTENTS

1. OBJECTIVES .................................................................................................................. 125

2. OVERVIEW ..................................................................................................................... 125

2.1. Background and Methodology .................................................................................. 125

2.2. Business Analysis ...................................................................................................... 127

2.3. Business Design ........................................................................................................ 128

2.4. Business Transformation ......................................................................................... 129

2.5. Conclusion ................................................................................................................. 130

3. CONTRIBUTION .......................................................................................................... 131
## TABLE OF CONTENTS

Figure 2-1: Diversification and Refocusing Methodology ........................................ 127  
Figure 2-2: Scope Axes ....................................................................................... 127  
Figure 2-3: Business Analysis process ................................................................. 128  
Figure 2-4: Design Methodology ...................................................................... 129
1. Objectives

The last chapter of this dissertation provides a summary of the most significant conclusions. These conclusions are discussed in terms of:

- An overview of the methodology; and
- the contribution of the dissertation.

2. Overview

2.1. Background and Methodology

It is becoming increasingly important for senior managers and corporate strategists to understand and act on the factors that influence, not only short-term profitability, but also long-term sustainability of their organisations. In the search to understand these factors and their influences, it became evident that organisations are inevitably bound to the industries that they serve. One of the best known and most established marketing concepts is the product life cycle. If products have life cycles, so too do the industries and organisations that produce them. It can thus be reasoned that the industry life cycle, of an industry that produces a range or sequence of products, will most likely be of longer duration than that of a single product.

It was further indicated that an organisation’s external environmental change is directly related to the change in the industry or industries that it serves. The
rate of environmental change (or industry change) is increasing and organisations that recognised the need to align and continuously realign seem to live longer. External change is an important factor that influences the destiny of an organisation. One of the ways of addressing industry change in order to align and continuously realign is by diversifying or refocusing the organisation’s portfolio.

It was also indicated that current approaches of addressing organisational change and transformation have nothing to do with the engineering discipline although being termed as engineering, re-engineering, innovation or redesign. Industrial Engineering is a discipline that is equipped with all the necessary skills to be a key stakeholder in business transformation issues. A subject area known as Business Engineering emerged and now serves as a theoretical home for the field that studies business transformation.

Various leading authors, top business professionals and consulting groups have different opinions regarding the use of diversification or refocusing. This leads to misconceptions and incorrect usage of these strategic tools. The dissertation presented an integrated diversification and refocusing approach that has been intended to serve as a guideline to senior management and corporate strategists. Figure 2-1 illustrates this integrated approach. The process consists off three main phases, Business Analysis, Business Design and Business Transformation.
2.2. Business Analysis

The Business Analysis phase starts by defining the scope of the organisation’s current portfolio. To visually illustrate the scope of an organisation’s portfolio, three axes are recommended as illustrated in Figure 2-2.
Once the portfolio scope has been defined, a thorough analysis of the environment should be made, in order to understand the current reality of the organisation’s portfolio. This will also lead to the identification of strategic issues that need to be addressed in the design phase of the methodology. A sub-process of the Business Engineering approach was adopted and is illustrated in Figure 2-3.

![Figure 2-3: Business Analysis process](image)

### 2.3. Business Design

A design process, presented in this dissertation (Figure 2-4), is used as a **guideline** in portfolio design, as this can not replace the creativity required in the architectural design of an organisation’s portfolio. The strategic issues or design criteria are channelled through the model in order to define the most suited future portfolio.
2.4. Business Transformation

Business transformation has been defined as being concerned with the implementation of the proposed architecture (in this case, of the proposed future portfolio). An organisation’s inherent behaviour does not change just because a new strategy has been announced. This dissertation proposed the following aspects in order to ensure successful implementation of the desired strategies.

- Defining an implementation plan;
- measuring performance against this plan; and
- creating strategic supportive “fits”.
2.5. Conclusion

By applying the proposed methodology to an organisation’s portfolio, in order to align with the changing environment, senior management and corporate strategist can be assisted in understanding and acting on the factors that influence their industries. By incorporating these results with creative thinking, a new portfolio can be defined that is inline with the changing environment.
3. Contribution

This dissertation introduced an alternative perspective on diversification and refocusing, as a business transformational problem, based on systematic engineering principles. By combining existing business diversification and refocusing principles with the Business Engineering approach a methodology was deduced that can evaluate diversification and refocusing based on an engineering approach. This is the most significant contribution. The dissertation also contributed in the following ways:

- It shows that the Business Engineering approach can be used to develop a systematic approach to diversification and refocusing.

- It supported the Business Engineering theory in showing how fundamental engineering skills can be applied to business problems.

- This dissertation adapted, refined and developed various processes and methods. (Figures 2.1, 3.1, 5.2, 5.3 and 5.5 of Part Three)

- An integrated diversification and refocusing methodology was presented.