

COLLABORATIVE BUSINESS MODELS: ENABLING ENTERPRISE  
DEVELOPMENT IN THE TOURISM AND HOSPITALITY INDUSTRY

by

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To my father and mother.

Thank you for all your love, patience, and support throughout the years.

## **Executive summary**

This document proposes to develop a spectrum of three generic business models which organisations in the tourism and hospitality industry can use when they need to incorporate Enterprise Development (ED) into their Corporate Social Responsibility (CSR) strategy. The models are: *All Control (AC)*, *Some Control (SC)*, and *No Control (NC)*. The AC business model describes the necessary steps of a business model which can be used by organisations that prefer to do ED on their own. The SC business model focuses on helping the second economy start-ups to deliver reliable services and quality products for organisations in the first economy and describes the relationships between entities. The NC business model is based on the concept of outsourcing and describes the necessary steps of the outsourcing process. An extensive literature study is carried out on different frameworks, strategies, and operational tools which can be used to formulate and execute profitable and sustainable business models followed by the application of the models to a case study.

## Acronyms

<b>AC</b>	All Control
<b>BBBEE</b>	Broad Based Black Economic Empowerment
<b>BEE</b>	Black Economic Empowerment
<b>BEP</b>	Break Even Point
<b>CSI</b>	Corporate Social Investment
<b>CSR</b>	Corporate Social Responsibility
<b>DTI</b>	Department of Trade and Industry
<b>ED</b>	Enterprise Development
<b>EDF</b>	Enterprise Development Fund
<b>FNB</b>	First National Bank
<b>GDP</b>	Gross Domestic Product
<b>IFC</b>	Innovation Franchise Concepts
<b>IRR</b>	Internal Rate of Return
<b>NC</b>	No Control
<b>NEDA</b>	The Nationwide Enterprise Development Administrators
<b>ROA</b>	Return On Assets
<b>ROI</b>	Return On Investment
<b>SAB</b>	The South African Breweries
<b>SC</b>	Some Control
<b>SLA</b>	Service Level Agreement
<b>SMME</b>	Small, Medium, and Micro Enterprise
<b>TQM</b>	Total Quality Management
<b>VRISA</b>	Value, Rareness, Imitability, Substitutability, and Appropriability

# Contents

<b>Executive summary</b>	<b>ii</b>
<b>Acronyms</b>	<b>iii</b>
<b>1 Introduction</b>	<b>1</b>
1.1 The context of the South African economy . . . . .	1
1.2 Enterprise Development (ED) . . . . .	2
1.3 The tourism and hospitality industry . . . . .	2
1.4 Problem identification . . . . .	3
1.5 Project aim . . . . .	3
1.6 Solution approach . . . . .	4
1.6.1 Model design . . . . .	4
1.6.2 Model development . . . . .	4
1.6.3 Model analysis . . . . .	5
1.7 Document structure . . . . .	5
<b>2 Literature study</b>	<b>6</b>
2.1 An introduction to business models . . . . .	6
2.2 Business model frameworks and operational tools . . . . .	7
2.2.1 The AC business model . . . . .	7
2.2.2 The SC business model . . . . .	14
2.2.3 The NC business model . . . . .	17
2.3 Decision making frameworks and operational tools . . . . .	19
2.4 Conclusion . . . . .	22
<b>3 Application and analysis of the conceptual models</b>	<b>23</b>
3.1 The AC business model . . . . .	23
3.1.1 Needs analysis . . . . .	23
3.1.2 Feasibility study . . . . .	24
3.1.3 Cost drivers . . . . .	26
3.1.4 Strategy . . . . .	31
3.2 The SC business model . . . . .	31
3.3 The NC business model . . . . .	33
3.4 Deciding on a business model . . . . .	33
3.5 Conclusion . . . . .	34

<b>Appendix A</b>	<b>36</b>
<b>Appendix B</b>	<b>43</b>
<b>Bibliography</b>	<b>43</b>

# List of Figures

2.1	A market research and planning framework . . . . .	10
2.2	Cost drivers of a business model . . . . .	11
2.3	Porter's five forces model . . . . .	11
2.4	Relationships between different components of a business model . . . . .	15
2.5	Enterprise Development Funds (EDFs) investing options . . . . .	18

# List of Tables

2.1	Value, Rareness, Imitability, Substitutability, and Appropriability (VRISA) analysis (adapted from (Afuah, 2004)) . . . . .	13
3.1	<i>How</i> business activities can be broken into smaller pieces . . . . .	27
3.2	Service Level Agreement (SLA) for the maintenance start-up . . . . .	27
3.3	The business activities <i>which</i> the maintenance start-up will perform (continued on next page) . . . . .	28
3.4	The business activities <i>which</i> the maintenance start-up will perform (continued from previous page) . . . . .	29
3.5	VRISA analysis of the maintenance start-up's resources . . . . .	30
3.6	Behavioural and performance measures of the maintenance start-up . . . . .	33
3.7	Characteristics of the maintenance start-up . . . . .	35
3.8	Cost price elements of the maintenance services . . . . .	37
3.9	Other expenses which the start-up may incur . . . . .	38
3.10	Summary of the once-off start-up expenses . . . . .	39
3.11	Monthly installments for different loan amounts . . . . .	40
3.12	Summary of the ongoing monthly expenses . . . . .	40
3.13	Summary of the assumptions made for the three scenarios . . . . .	41
3.14	Capital summary for the three scenarios . . . . .	41
3.15	Profit summary for the three scenarios . . . . .	41
3.16	A detailed example of <i>how</i> business activities can be broken into smaller activities (continued from previous page) . . . . .	44
3.17	A detailed example of a SLA . . . . .	45

# Chapter 1

## Introduction

### 1.1 The context of the South African economy

Trade and Industrial Policy Strategies (2009) states that “South Africa has a highly unequal economy in which people with access to wealth experience South Africa as a developed modern economy, while the poorest still struggle to access even the most basic services”. The difference in living conditions between the two classes of people is so stark and appears to be worlds apart. From this economic dichotomy the *first* and the *second* economy have arisen. The first economy comprises wealth and resources and includes citizens that are employed with some form of training or qualification. The second economy comprises poverty and disadvantage and includes citizens that are unemployed with very little or no form of training or qualification. The second economy comprises 21% of all South African citizens between the ages of 16 and 65 (Kirsten, 2006).

Over the period 1994 to 2004 the Human Sciences Research Council, the United Nations Development Programme, and the Development Bank of Southern Africa performed a statistical analysis which showed an annual increase of 3% in the overall economy, an annual increase of 2% in population size, and an annual decrease of 4% in the labour intensity of production (Kirsten, 2006). This increase in the economy is not sufficient to offset the combined effect of the increase in population size together with the decrease in labour intensity of production. The analysis predicted that unemployment may rise to 33% in 2014 if no action is taken against the factors of this combined effect.

Since the beginning of the 21<sup>st</sup> century, South Africa’s government ensured that Corporate Social Responsibility (CSR) was “implemented on a higher level as organisations are now enforced with government legislation” (Van Den Ende, 2004). Black Economic Empowerment (BEE) is one of the vehicles with which companies can comply to CSR in South Africa (Wolmarans and Sartorius, 2009). BEE is a pragmatic growth strategy which aims to increase black participation at all levels of the economy through transformation and is driven by legislation and regulation which forces private companies to apply the codes of good practice in their businesses. A generic score card is used to measure an organisation’s empowerment progress in four different areas: (1) direct empowerment through ownership and control of enterprises; (2) management at senior level; (3) human resources development and employment equity; and (4) indirect empowerment through preferential procurement, Enterprise Development (ED), and Corporate Social Investment

(CSI) (Hamann et al., 2008).

The Department of Trade and Industry (DTI) developed a new framework in 2006 which aims to contribute to the vision of “South Africa as an entrepreneurial nation that rewards and recognises those who recognise a business opportunity” (Kirsten and Rogerson, 2002). This framework requires that industries and organisations show a significant progress in empowerment to stay competitive in the South African market.

Hamann et al. (2008) argue that

*“...the prevailing approaches to CSR are so fragmented and so disconnected from business and strategy as to obscure many of the greatest opportunities for companies to benefit society. If, instead, corporations were to analyse their prospects for social responsibility using the same frameworks that guide their core business choices, they would discover that CSR can be much more than a cost, a constraint, or a charitable deed — it can be a source of opportunity, innovation, and competitive advantage.”*

Therefore, South African organisations should aim to recognise and develop enterprise opportunities which will lead to competitive advantages and simultaneously contribute to the second economy.

## 1.2 Enterprise Development (ED)

ED, one of the areas on which an organisation’s empowerment progress is measured, is a concept whereby an organisation aims to benefit from enterprises they develop for previously disadvantaged people. Grant (2008) states that “ED can be anything from the creation of new enterprises to the redevelopment or funding of existing enterprises with the intention of accelerating such an enterprise, or many activities in-between. The critical issue is that it relies on ideas that create sustainable enterprise initiatives that respond to fulfilling a need in either the consumer or B2B (business to business) market.”

South African organisations can incorporate ED into their Corporate Social Responsibility (CSR) strategy and simultaneously create operational benefits while complying to legislation. The South African Breweries (SAB) is a good example of many South African companies who have successfully incorporated and developed the concept of ED into their CSR and sustainable development strategies. SAB aimed to improve the quality of life for local people and build strong relationships through suppliers, consumers, and their employees with their CSR activities. In one of their CSR activities, SAB helped tavern owners to acquire liquor licences and develop their managerial skills by sending them for short management courses at the University of Johannesburg (Adami, 2008).

## 1.3 The tourism and hospitality industry

It is known that tourism enterprises improve the livelihoods of poor communities and alleviates poverty (Kirsten and Rogerson, 2002). In 1998 the World Travel and Tourism Council predicted that the tourism sector will become one of the key drivers of economic expansion and employment creation in South Africa by transforming the tourism an hospitality industry (Rogerson, 2007).

This transformation would be achieved by placing disadvantaged people in established positions where they can own and run tourism businesses, improving the livelihoods of poor communities and alleviating poverty (Kirsten and Rogerson, 2002).

On 4 March 2010 the Tourism Minister, Marthinus van Schalkwyk, reported that South Africa's tourism industry increased with 3.6% against an international decline of 4%. In 2005 South Africa's tourism industry contributed more than 14% to the country's Gross Domestic Product (GDP) (Stats, 2010). These percentages justify the fact that South Africa's tourism industry serves as a key source to alleviate poverty.

The promotion of Small, Medium, and Micro Enterprises (SMMEs) is an issue of critical concern for policy makers in terms of future development of the tourism economy in line with government objectives of transformation and Black Economic Empowerment (BEE) (Rogerson, 2005). Organisations have to incorporate environmental concerns, corporate governance, and social responsibility (also known as the triple bottom line — people, profit, and planet) into their mission statements and integrate these ideas into a holistic sustainable development strategy to stay competitive in the market (Houdre, 2010).

## 1.4 Problem identification

An opportunity exists for integrating ED into the context of the tourism and hospitality industry. The challenge remains on how the concept of ED should be integrated into an organisation's CSR strategy in order to deliver sustainable start-ups within the tourism and hospitality industry. Furthermore, opportunities exist for enhancing operational benefits while simultaneously fulfilling BEE requirements by incorporating ED into an organisation's strategy. Following this strategy, especially in the tourism and hospitality industry, would do a great deal to alleviate poverty and uplift poor communities.

## 1.5 Project aim

The project proposes to develop a spectrum of three generic business models which organisations in the tourism and hospitality industry can use when they need to incorporate ED into their CSR strategy. The models, represented on a spectrum, will be developed by focusing on the relationship between established businesses in the tourism and hospitality industry and start-ups resulting from their ED efforts. Organisations should determine their position on the spectrum and subsequently decide on a business model that best fits their policies and objectives.

The following research question will be addressed:

*“Which of the three business models should be used to develop a sustainable tourism and hospitality enterprise start-up?”*

## 1.6 Solution approach

The project will be approached by using the following sequential phases:

### 1.6.1 Model design

Three different generic business models are designed:

**All Control** describes the necessary steps for creating an SMME start-up in the tourism and hospitality industry. Such steps include a needs analysis, feasibility studies, market research and planning, the structuring of a business plan, skills development, identifying relevant legislation, resource requirements, planning and managing business finances, and developing strategies for sustainability growth. This business model should be used by organisations that prefer to do ED on their own.

**Some Control** describes the relationships and responsibilities between different entities for first economy organisations that prefer to partner and enter into contractual agreements with institutions for the development of the SMME start-up. Institutions such as universities and business schools may partner and enter into contractual agreements with the first economy organisations for the start-up ED of the SMME. This business model focuses on helping the second economy start-ups to develop reliable services and quality products for organisations in the first economy and will contribute to the operations of the first economy organisations and form a part of their CSR.

**No Control** is based on the idea of outsourcing where organisations prefer to go to companies who specialise in ED. The Nationwide Enterprise Development Administrators (NEDA) and Innovation Franchise Concepts (IFC) are some of South Africa's leading companies formulating ED strategies and allocating ED funds on behalf of organisations. This business model describes the necessary steps and requirements for the outsourcing process.

### 1.6.2 Model development

An extensive literature study is carried out to address the following factors:

1. the definition of a business model;
2. business model dynamics;
3. business model development frameworks;
4. cost drivers of a business model; and
5. the profitability and sustainability of business models

The objective of the literature study is to analyse existing business models by examining the way in which the models were applied and whether or not it was a success. Frameworks and operational tools will be adjusted accordingly to fit the industry of tourism and hospitality for each of the three business models.

### **1.6.3 Model analysis**

After the business models have been developed they should be analysed and validated. The business models will be analysed by applying appropriate evaluation frameworks found in the literature to a case study and will be measured and compared by looking at the following factors:

- financial factors such as the cost, payback period and Break Even Point (BEP);
- economic factors such as Return On Assets (ROA), Return On Investment (ROI), and Internal Rate of Return (IRR); and
- performance rating of decision variables for the tourism and hospitality industry

Experts within the tourism and hospitality industry will be used to define decision variables, such as customer satisfaction and time and cost constraints, and validate the business models.

## **1.7 Document structure**

Chapter 2 presents a review of the literature study performed on business models. Supporting concepts, business processes, frameworks, and operations management tools are reviewed and used to develop the three conceptual business models. Chapter 3 provides the analysis of the three conceptual business models followed by a conclusion.

# Chapter 2

## Literature study

### 2.1 An introduction to business models

There is no widely accepted definition for a business model. However, Morris and Allen (2005) identified three categories of definitions by analysing the content of key words in thirty definitions. The categories are based on their principle emphasis and are labeled *economic*, *operational*, and *strategic*.

The *economic* category is concerned with profit generation and includes decision variables such as revenue sources, pricing methodologies, cost structures, margins, and expected volumes. Stewart and Zhao (2000) defines this category as “a statement of how a business will make money and sustain its profit stream over time.”

The *operational* category focuses on internal processes and design of infrastructure which enables a business to create value. The category includes decision variables such as production or service delivery methods, administrative processes, resource flows, knowledge management, and logistical streams (Morris and Allen, 2005). Mayo and Brown (1999) defines this category as “the design of key interdependent systems that create and sustain a competitive business.”

The *strategic* category focuses on a business’ market position and growth opportunities and is concerned with the competitive advantage and sustainability of a business. The category includes decision variables such as stakeholder identification, value creation, differentiation, vision, values, and networks and alliances (Morris and Allen, 2005). Slywotzky (1996) defines this category as “the totality of how a business selects its customers, defines and differentiates its offerings, configure its resources, and creates utility for customers.”

Accordingly, Morris and Allen (2005) propose the following integrative definition of a business model:

*“A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economies are addressed to create sustainable competitive advantage in defined markets.”*

A great many types of business models exist: outsourcing business models, hybrid business models, six sigma business models, organisational business models, business operational models, and business maturity models, to name only a few. Business models affect the entrepreneurial

performance of an organisation and enables them to develop sustainable and profitable businesses (Zott and Amit, 2007). Therefore, the development of a business model will have a major impact on the success of any business.

## 2.2 Business model frameworks and operational tools

In his book, *Business Models — A Strategic Management Approach*, Afuah (2004) developed an integrative framework for exploring how to formulate and execute profitable and sustainable business models. His work is foundational to the development of the three unique business models (All Control (AC), Some Control (SC), and No Control (NC)).

Each of the following subsections are devoted to the development of one of the conceptual business models. The models will be developed by integrating the models' design into the function and purpose of a framework and/or operational tool.

### 2.2.1 The AC business model

First economy organisations can benefit from enterprises they develop for previously disadvantaged people who has a skill which they can use to sell a product and/or service to the organisation. These organisations should identify their organisational needs in order to determine the potential Enterprise Development (ED) start-ups they can develop to fulfil their organisational needs. This can be done by doing a needs analysis. Strydom (2007) proposes that the following points should be addressed when executing a *needs analysis* (see Strydom, 2007, Chapter 6):

1. Identify the characteristics, needs, and purchasing patterns of your customers
2. Be very specific about who your customers are and be able to describe a typical profile
3. Establish how you can provide the right product or service at the right price
4. Identify the market where your product(s) and/or service(s) will be most widely accepted

After the organisational needs have been identified it should be determined whether or not the development of a start-up, which can fulfil these needs, will be feasible. This can be done by doing a *feasibility study*.

A feasibility study will aid the organisation to distinguish between an idea and a valuable opportunity. Fisher (2009b) developed a framework which will guide organisations in assessing and developing new business ideas by observing how experienced early stage investors assess potential new venture opportunities — to distinguish between an idea and a valuable opportunity which will be worth investing in. The following list (adapted from Fisher (2009b)) illustrates this framework.

---

**Technical feasibility — Is it doable?**

1. *Is the technology for the product or service already available, or is it still in development?*
2. *If it is still in development, what stage of development is it in and what can go wrong?*
3. *If it is already available, is anyone else using it to develop the same product or service as you? If not, why has no one done so yet? If so, who are they and how does that affect your prospects?*
4. *What kind of entry barriers does your technology provide? How long would those entry barriers last should your idea prove to be a high potential opportunity?*
5. *What are your technological risks? List reasons why the end user might not want to use your technology, even though your product or service may be technologically superior.*
6. *What other nascent technologies might become competition in the future one year from now, five years from now, a few decades from now?*

**Market feasibility — Is there a need?**

1. *What exactly will you be selling? What is your value proposition? Can you clearly express this value proposition in an elevator pitch?*
2. *How do you define your niche? How large is the market? How fast is it growing?*
3. *Who is your customer? Describe a typical profile.*
4. *What is the customer's need?*
5. *How is the need currently being filled?*
6. *What critical factors will lead you most quickly to your customer base?*
7. *Who or what is the competition? What are the advantages and disadvantages of your product or service over the competition?*

**Financial feasibility — Is it profitable?**

1. *What are the sources of revenue for the business? What will the customer pay per transaction?*
2. *How many transactions will you do in a day, week, month or year?*
3. *What are the major costs for the new business? What is the nature of those costs — fixed, variable, or semi-variable?*
4. *Is there a good profit margin in the basic economics of the business?*
5. *What size capital investment is required to launch and sustain the business?*

6. *What would convince an investor to contribute those funds?*
7. *How is the financial health of the business affected by the timing of cash flows — when revenue will be collected and when costs will need to be paid?*
8. *How long will it take the business to break even?*
9. *State the primary financial assumptions for your projections.*
10. *How sensitive are your projections to changes in price, technology, competition, and your own growth?*
11. *Develop best-case and worst-case financial scenarios.*

**Team skills and desire — Do we want to do it?**

1. *What special strengths do you bring to this enterprise?*
  2. *Why are you or your team likely to be more successful in this business than others?*
  3. *What are your relevant weaknesses and how will you overcome or compensate for them?*
  4. *Why do you want to do this — really?*
  5. *Are you willing to live with uncertainty?*
  6. *Will you be able to bounce back from potential failures?*
  7. *Can you adapt and refocus on a continuous basis?*
  8. *Is this the right time for you to do this? Your family?*
  9. *What are your exit strategies or options?*
- 

If, and only if, the feasibility study has proven that the start-up idea will be a valuable opportunity worth investing in, the first economy organisation can continue with a proper *market research and planning study*.

Market research and planning is a key tool which is used to manage the risk associated with launching a business<sup>1</sup> and will aid the organisation in determining whether or not the business will be successful. Fisher (2009a) developed a framework (Figure 2.1) which organisations can use to focus their research process in such a way that maximum return on time and effort is ensured. The framework focuses on the four C's: (1) Customers; (2) Competitors; (3) Collaborators; and (4) Company model, and are discussed in the following paragraphs.

1. The *customer* perspective is concerned with the approximate amount of potential customers (market size), the rate at which the customer base is growing (market growth rate), and what will influence the customers decision in buying the product or service (key influence).

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<sup>1</sup>Hereafter, a business refers to a Small, Medium, and Micro Enterprise (SMME) start-up in the tourism and hospitality industry

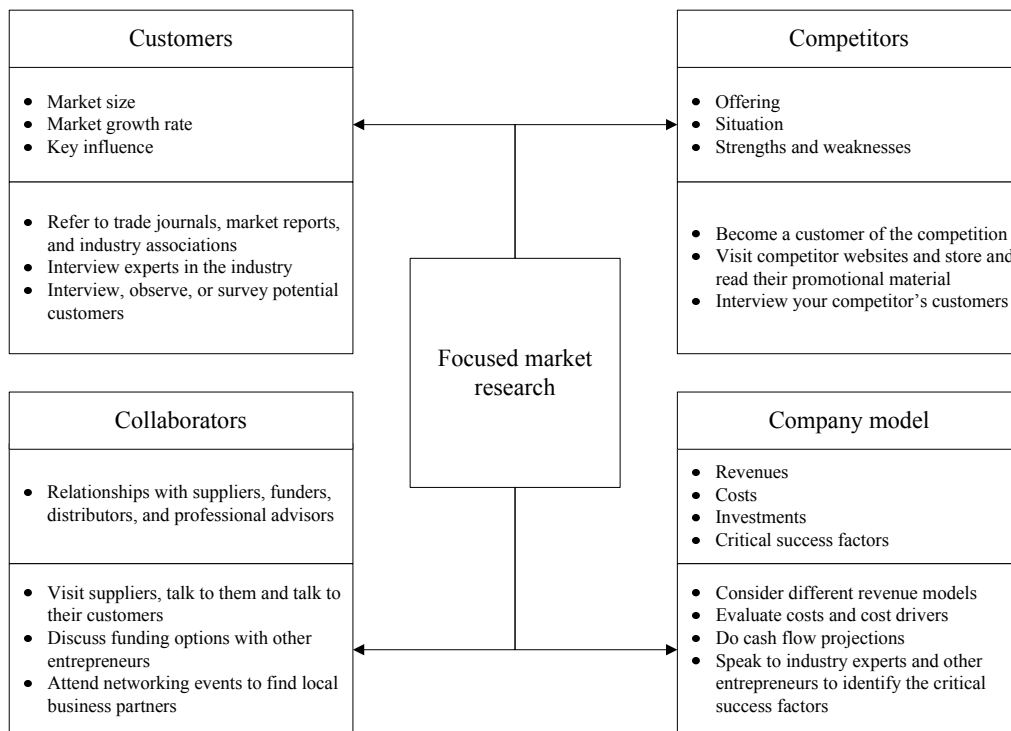


Figure 2.1: A market research and planning framework (Adapted from Fisher (2009a))

2. The *competitor* perspective determines who your competitors are, what they offer their customers, where they are situated, and what their strengths and weaknesses are.
3. The *collaborator* perspective ensures that entrepreneurs form alliances with the people they rely on to make their business model work. These people may include suppliers, funders, distributors, and professional advisors.
4. The *company model* perspective involves calculations regarding the derivation of revenues and the costs incurred to obtain these revenues. It is necessary to know what type of investment will be needed for the start-up, as well as what the necessary success factors will be.

A market research and planning study will not be conducted in this project for market research and planning is a study on its own and does not fall within the scope of this project. However, first economy organisations should always conduct a market research and planning study after completing the needs analysis and feasibility study in order to prevent start-up failure and decrease operational risks.

After the organisation has completed the market research and planning study they should use the framework represented in Figure 2.2 to determine the factors that contribute to the profitability of the business.

**Position drivers** A business' position within an industry is determined by: (1) the *value* that the business offers its *customers*; (2) the market segments to which it offers value; (3) the sources of revenues within each market segment; (4) the business' relative *positioning* vis-à-vis

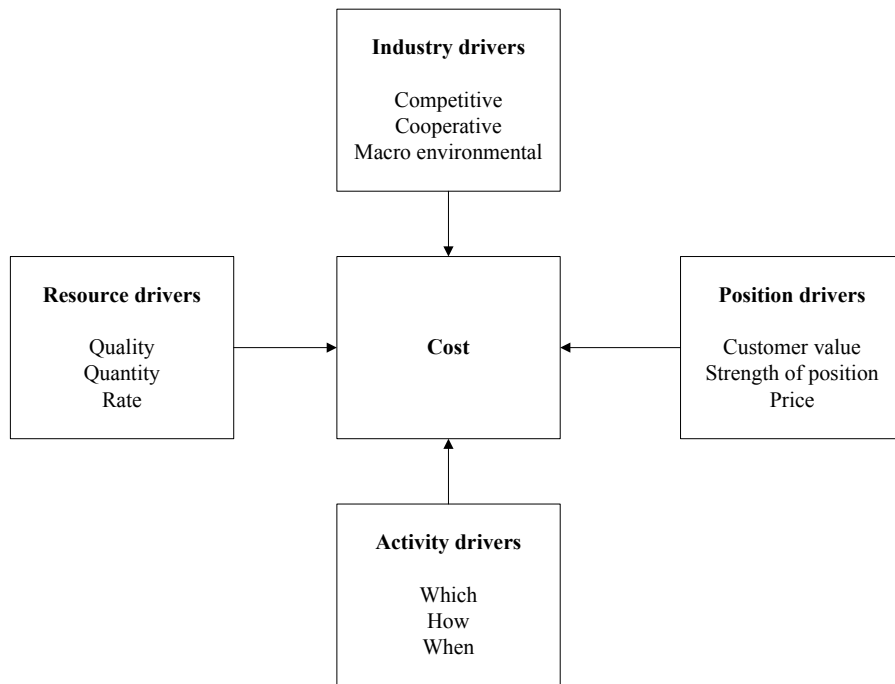


Figure 2.2: Cost drivers of a business model (adapted from (Afuah, 2004))

its suppliers, customers, rivals, potential new entrants, substitute products, and complements; and (5) the *prices* it charges to customers (Afuah, 2004).

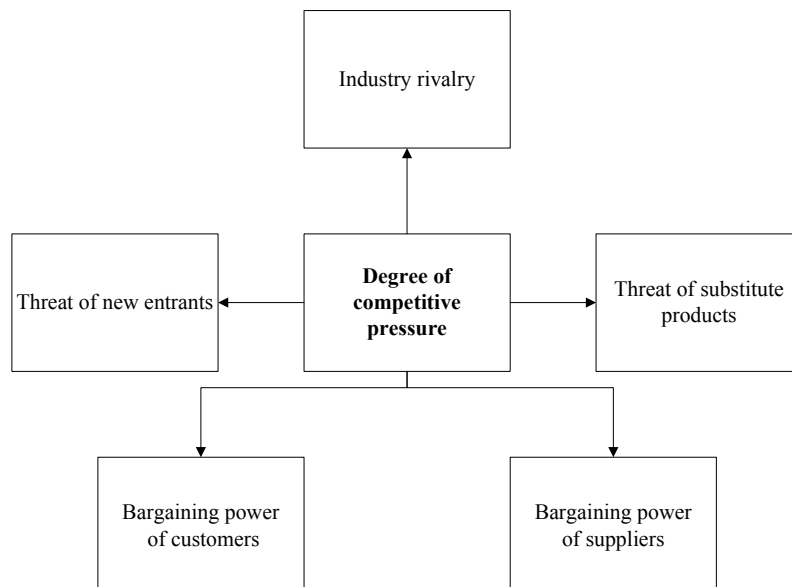


Figure 2.3: Competitive forces within an industry (adapted from (Porter, 1976))

These factors can be determined by using Porter's Five Forces model Porter (1976). The model, represented in Figure 2.3, identifies five forces that either increase or decrease competitive forces within an industry. Greater competitive forces within an industry will lead to greater pressure on the prices businesses charge for their products or services, whereas weaker competitive forces will lead to less pressure on these prices.

1. The *bargaining power of customers* analyses the level of bargaining power that the customers (or prospective customers) has over the business. Porter (1976) argue that "this force is driven, in part, by the number of prospective customers compared to the number of suppliers." Strong customers may use their bargaining power to play the business of against its competitors to get lower prices or better quality at the same price.
2. The *threat of new entrants to the industry* analyses the impact that new entrants to the industry may have on the business. New entrants may not always be a threat to the industry — sometimes new entrants can cause more good than harm to the business. If, for example, you own a tuc shop, the opening of three other tuc shops near you may attract more customers to the area.
3. The *bargaining power of suppliers* analyses the level of bargaining power that suppliers (or prospective suppliers) has over a business. It is important to determine if your suppliers will be able to operate without your business' support — how much bargaining power they have over you.
4. The *threat of substitute products or services* analyses the impact that substitute products or services will have on the business — whether customers will easily be able to find products or services they can substitute the business' product or services with.
5. *Rivalry amongst existing businesses* looks at the possibility of competitors and when they aim to grow their business.

A business can deliver the right value to the right market segments by performing the activities that underpin these positions. These activities are determined by looking at the activities *which* the business will perform, *how* it will be performed, and *when* it will be performed as is explained in the following paragraph.

**Activity drivers** The extent to which a business can attain and maintain profitable positions is a function of *which* activities it chooses to perform, *how* it performs them, and *when* it performs them. Some business activities keep costs low while other activities, such as differentiation activities, increases cost. The way in which a business performs its activities also plays a role in the cost of a business model. Operational methods such as Total Quality Management (TQM), reengineering, and benchmarking can assist in reducing the cost of activities. Activity drivers can be enforced by compiling a Service Level Agreement (SLA) between the organisation developing the business, and the business itself.

**Industry drivers** Businesses in every industry face competitive forces exerted by suppliers, customers, rivals (businesses offering similar services), potential new entrants, complements, and substitute products or services.

There are three industry factors that drives the cost of business models in every business: (1) competitive forces; (2) cooperative forces; and (3) the macro environment in which a business operates. A business' *competitive forces* are determined and exerted by the competitors who operate in similar environments and markets. *Cooperation* in an industry can play an important role in the cost of activities that businesses in the industry perform. In the semiconductor industry, where research and development costs are high, rivals often form alliances to share development costs. In the *macro environment* costs are impacted by government policies, fiscal and monetary policies, judicial and legal systems, and technological change.

**Resource drivers** A business needs resources to perform the business activities that customers value. A business' resources may include tangible assets (plants and equipment), intangible assets (patents, brands, copyrights, trade secrets, and market research findings), and/or human assets (skills and knowledge). The cost of a business' resources is determined by the *quality* of the resources, the *quantity* of resources that the business owns, and the *rate charged* for the use of the resources.

When resources are valuable and difficult to immitate they can serve as a competitive advantage for the business. The value, quality, and profitability potential of resources can be assessed by using the Value, Rareness, Imitability, Substitutability, and Appropriability (VRISA) analysis represented in Table 2.1.

Table 2.1: VRISA analysis (adapted from (Afuah, 2004))

<b>Attribute</b>	<b>Key Question</b>
<b>Value</b>	Does the resource provide the customers with something that they value?
<b>Rareness (uniqueness)</b>	Is your business the only one with that capability? If not, is its level of capability higher than that of competitors?
<b>Imitability</b>	Is it easy for other businesses to immitate the resource?
<b>Substitutability</b>	Can another resource offer customers the same value that your business' resource does?
<b>Appropriability</b>	Who makes the money from the resource?

After the cost drivers have been identified, the organisation should develop *strategies* for sustainability growth. Afuah (2004) explains that "a strategy involves committing to undertake one set of actions rather than another and, in the process, creating a unique and valuable position that allows the business to perform better than its competitors." Thus, a strategy is used to decide which activities a business should or should not perform in order to create competitive advantages for sustainable business models.

(Morris and Allen, 2005) also propose an entrepreneurial strategy-making process to develop a business' strategy. The process develops strategies for proactive businesses that seek growth in the short and long term by looking at factors such as: (1) the goal and vision of the business;

(2) the objectives of the business; and (3) the environment in which the business operates. This strategy-making process will be used to develop effective and efficient strategies for businesses.

To conclude, first economy organisations can develop their ED start-ups by using the following sequential process of the AC business model:

1. Conduct a needs analysis;
2. Conduct a feasibility study;
3. Do a proper market research and planning study;
4. Identify the cost drivers of the start-up; and
5. Develop strategies for sustainability growth.

This sequential process will be used to analyse the AC model in Chapter 3.

### 2.2.2 The SC business model

Nazzal (2010) states that “education and continuous innovation are two keys to business growth, and both assist the capacity of nations to produce wealth”. The SC business model will be developed by using the framework illustrated in Figure 2.4. The framework focuses on the relationships between different components of a business model which contribute to the profitability and sustainability of a business. The components are illustrated in Figure 2.4 and include: (1) the structure; (2) the systems and processes; (4) the people; and (5) the performance of the business model. The following paragraphs discuss the function and purpose of these components in more detail as well as the way in which they will be applied in the development of the SC business model.

The business model of a business uses certain systems and processes to perform its business activities. These activities are performed by the people who own and operate the business and should be structured in an organised manner so as to perform a collection of specified functions to specified levels of performance.

**People** People are central to everything in a business model — they are responsible for the performance of a business by using and implementing its structures, systems, and processes (Afuah, 2004). The different people who will play a role in the SC business model include: (1) graduate and postgraduate students of institutions such as universities or business schools; (2) first economy organisations; and (3) second economy organisations.

Students from a university within an engineering department may, for example, include graduate or postgraduate students with either a BEng, MEng, or PhD degree. These students can help the second economy start-up’s to develop reliable services and quality products for organisations in the first economy. First economy organisations can partner and enter into contractual agreements with institutions for the development of the SMME start-ups for people in the second economy.

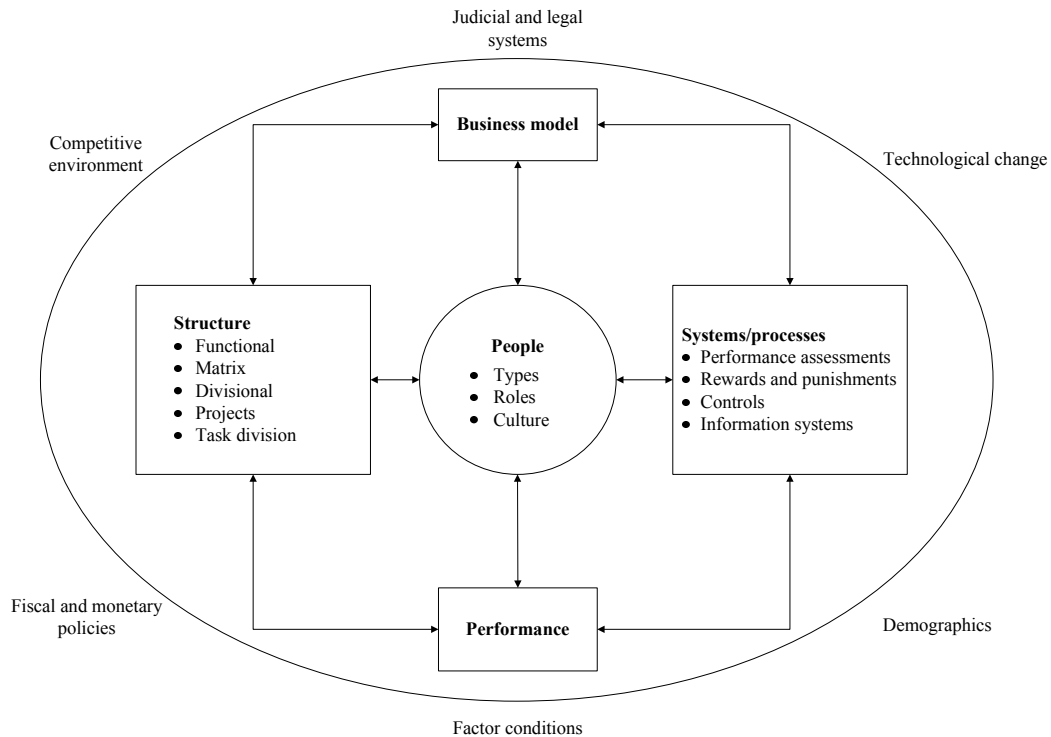


Figure 2.4: Relationships between different components of a business model (Adapted from Afuah (2004))

**Structure** An organisational structure shows who is responsible for what activities in a business.

In one of his frameworks Afuah (2004) identified five different types of structures:

1. functional structure;
2. multidivisional (*M-form*) structure;
3. matrix structure;
4. project structure; and
5. network structure

In a functional structure people are organised according to the function they perform. People with similar tasks and knowledge are grouped in the same locations and can therefore communicate easily and develop in-depth knowledge of their department. A multidivisional (*M-form*) structure organises people by division enabling management to focus their attention on their specific division. Divisions can be organised by product type, customer type, or the geographic region. The matrix structure captures the benefits of both the functional structure and the multidivisional structure and enables people to simultaneously work on multiple projects. A project structure organises people according to projects they are working on and enables interaction between people. Finally, a network structure is used when a business outsources all its major value-adding activities which enables the business to avoid large assets.

The SC business model will make use of the project structure in order to organise the different people who play a role in the model. The project structure will ensure interaction between these people by organising them according to the projects they are working on and will be illustrated with the case study in Chapter 3.

**Systems and processes** The systems, which a business use to operate and do business, “spell out how the performance of individuals, groups, functions, divisions, and organisations is monitored (especially feedback on how the organisation’s or group’s members are doing), measured, rewarded, and punished.” Systems are composed of components, attributes, and relationships which are described as follows (Stark, 2006):

1. *Components* are the parts which a system consist of.
2. *Attributes* are the properties such as characteristics, qualities, powers, constraints, and the state of the components and of the system as a whole.
3. *Relationships* between pairs of linked components resulting from engineering the attributes of both components so that the pair operates together effectively in contributing to the system’s purpose(s).

Therefore, a system can also be described as a set of interrelated components functioning together toward some common objective(s) or purpose(s).

A process is defined as the “patterns of interaction, coordination, communication, and decision making [that] employees or machines (automated technologies) use to transform resources into products and services of greater worth” (Christensen and Overdorf, 2000). It should be noted that performance measures, rewards, and information flow are different for different types of businesses and industries.

In 2006, South Africa’s government introduced the R&D (Research and Development) Tax Incentives to “ensure that South African taxpayers and enterprises of all sizes and sectors of the economy are encouraged to conduct R&D locally which will lead to new, improved, or technologically advanced products, processes, or systems” (Njamela, 2006). The new law includes a 150% tax benefit for eligible activities and uses “accelerated depretiation of assets” which are used for purposes of scientific and/or technological R&D (Njamela, 2006). The law allows capital expenditures to be deducted over a period of three years with 50%, 30%, and 20% deduction in the first, second, and third years, respectively. Deductions are only allowed on “the amount that exceeds the difference between the total expenditure and twice the amount of the government grant” (Department of Science and Technology, 2006).

Accordingly, the following system is proposed for the SC business model:

First economy organisations can partner and enter into contractual agreements with institutions, such as universities or business schools, for the development of their ED SMME start-ups. These agreements should include the responsibilities of the different role players, such as the basis on which students (graduates and postgraduates) will be available to help the first economy organisations. The model will decrease operational risks of first economy organisations by providing proper organisational design and operational support to second economy organisations.

By making use of the grant funding that the government provides for R&D, these institutions can help the first economy organisations by designing, developing, and improving second economy organisations.

First economy organisations will provide value to the system by: (1) creating opportunities for students to develop their skills when they do assignments and projects which will contribute to the design, development, and improvement of second economy organisations; and (2) developing SMME start-ups for second economy organisations.

Institutions will provide value to the system by: (1) conducting R&D on behalf of first economy organisations for the design, development, and improvement of second economy organisations; and (2) offering operational support to the second economy organisations through effective and efficient training for the newly developed or improved systems which the SMME start-ups can use to operate their businesses.

Second economy organisations will provide value to the system by: (1) providing first economy organisations with reliable services and quality products that they value.

**Performance** The balanced scorecard can be used to measure the financial and organisational performance of a business. Performance is measured from four perspectives: (1) customer; (2) internal; (3) innovation and learning; and (4) financial. Each perspective is measured on objectives, measures, targets, and incentives and asks a specific question related to the business:

1. The customer perspective asks *“How does the customers see us?”*
2. The internal perspective asks *“What should we excel in?”*
3. The innovation and learning perspective asks *“Can we continue to improve and create value?”*
4. The financial perspective asks *“How are we viewed by our stakeholders?”*

These perspectives can be measured by focusing on service delivery, quality, and cost as decision variables.

### 2.2.3 The NC business model

The Nationwide Enterprise Development Administrators (NEDA) and Innovation Franchise Concepts (IFC) are some of South Africa’s leading companies formulating ED strategies and allocating Enterprise Development Funds (EDFs) on behalf of organisations. They have come up with various franchised business models “that provide entrepreneurially minded people with a working infrastructure, powerful brand, meaningful support, and funding to start and run a successful business” (De Bruyn, 2008).

The NC business model’s development is based on the processes that NEDA and IFC use to formulate ED strategies and allocate EDFs on behalf of organisations. Accordingly, the necessary requirements that an organisation need to follow when they prefer to outsource their ED activities are described.

## The function and processes of NEDA and IFC

NEDA brings together *contributors* and *beneficiaries* by suggesting the consideration of three investment options for the EDFs of organisations.

The options are illustrated in Figure 2.5, followed by a brief discussion.

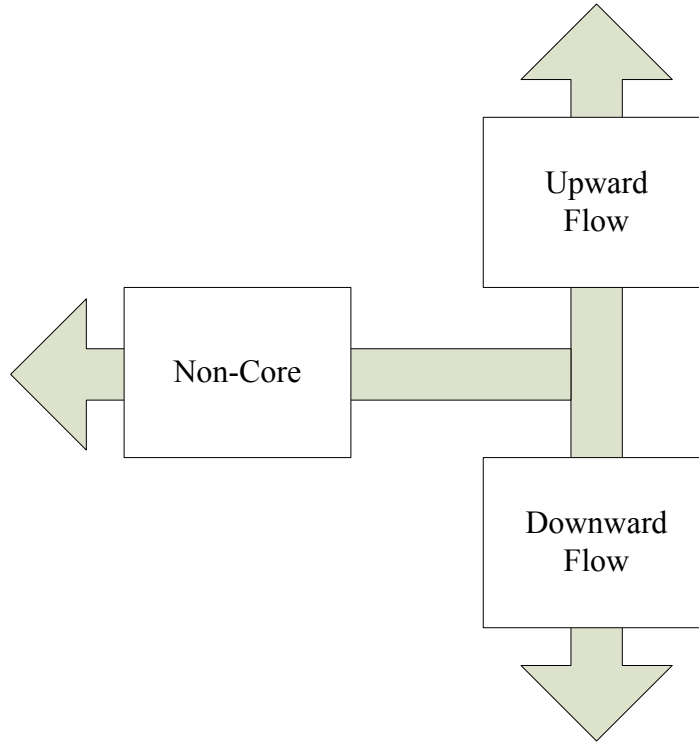


Figure 2.5: EDFs investing options (Adapted from De Bruyn (2008))

1. Upward Flow — where the *contributor* can invest in a supply chain to the *beneficiary*. In this option the contributor invests in a beneficiary, as a supplier, who can supply the goods he requires. A supplier of fruit juice (the contributor), for example, can invest in the start-up of a bottle supplier (the beneficiary). The contributor can either supply funds or actual resources to the beneficiary, such as factory space. The contributor could guarantee the beneficiary a minimum order every month, and the beneficiary could acquire other clients (Grant, 2008).
2. Downward Flow — where the *contributor* invests in a customer or a group of customers. In this option, an organisation can supply an outside business with products your company sells and that this business requires to operate. Street vendors, for example, require gas equipment for cooking their take-away food. A gas equipment company could supply the necessary equipment and assist in creating a self-sustaining business for the street vendors (Grant, 2008).
3. Non-core — where a *beneficiary* has no involvement in or relevance to the business of the *contributors*. In this option the contributor will just supply the EDFs in order to obtain their

Broad Based Black Economic Empowerment (BBBEE) points.

NEDA is responsible for managing the EDFs of contributing companies, while IFC is responsible for the actual development of the start-ups. NEDA covers their operating expenses by complying to the ED Code of Good Practise, as per Section 600 of the Code of Good Practise, which allows for 15% of EDF contributions paid to administrators. This means that first economy organisations will pay up to 15% of the contribution they make to beneficiaries.

The franchised business models, which IFC uses to develop the start-ups, are designed such that both the organisation which decided to outsource their ED activities (the franchisor) and the entrepreneur (the franchisee) for whom the start-up will be created will benefit from the process. The franchisor will benefit from the process by receiving 100% recognition of their EDFs, full points on their BBBEE scorecard, regular feedback on the project, and fast turnaround time. The franchisee will benefit from the process by operating with the brand name of the franchise, by using the operating methods of the franchisor, by receiving support and expert advice from the franchisors management team, and by receiving training on all aspects of the business such as how equipment should be used, knowledge regarding the products and services of the franchise, and book keeping and stock management.

NEDA and IFC focus their franchised business models in such a way that the Return On Investment (ROI) of a project is maximised. Returns can be achieved through increased revenue, increased profitability, and improved supplier service delivery (Grant, 2008).

### **The outsourcing process**

The first step that a first economy organisation need to follow when outsourcing an ED activity is to submit their project at IFC. Once the projected has been accepted, the organisation has to decide on one of the investing options for their EDFs. This decision will be based on the type of start-up that the organisation plans to create, as will be illustrated with the case study in Chapter 3. After the orgnisation decided on one of the investing options IFC will use one of their franchised business models for the development of the start-up franchise and then the organisation can provide the necessary contribution(s) to NEDA which will manage the organisation's EDFs (Any contributions from R10,000 to R1, 000, 000 can be facilitated).

## **2.3 Decision making frameworks and operational tools**

Morris and Allen (2005) developed a framework for characterising a business regardless of venture type. The framework, which is applicable to firms in general but also serves the needs of the individual entrepreneur, consists of six components: (1) factors related to the offering; (2) market factors; (3) internal capability factors; (4) competetive strategy factors; (5) economic factors; and (6) personal and investor factors. The components are expanded on in in the following list (adapted from (Morris and Allen, 2005)):

---

**Component 1 (factors related to the offering): How do we create value? (select from each set)**

- Primarily products/ primarily services/ heavy mix
- Product and/or service range: Standardized/ some customization/ high customization
- Specialisation: Broad line/ medium breadth/ narrow line
- Access to product/ product itself/ product bundled with other firm's product
- Internal manufacturing or service delivery/ outsourcing/ licensing/ reselling/ value added reselling
- Direct distribution/ indirect distribution (if indirect: single or multichannel)

**Component 2 (market factors): Who do we create value for? (select from each set)**

- Type of organisations: B2B (business to business)/ B2C (business to consumer)/ both
- Local/ regional/ national/ international
- Position of customer in value chain: upstream supplier/ downstream supplier/ government/ institutional/ wholesaler/ retailer/ service provider/ final consumer
- Broad or general market/ multiple segment/ niche market
- Transactional/relational

**Component 3 (internal capability factors): What is our source of competence? (select one or more)**

- Production/ operating systems
- Selling/ marketing
- Information management/ mining/ packaging
- Technology/ research and development/creative or innovative capability/ intellectual
- Financial transactions/ arbitrage
- Supply chain management
- Networking/ resource leveraging

**Component 4 (competitive strategy factors): How do we competitively position ourselves? (select one or more)**

- Image of operational excellence/ consistency/ dependability/ speed

- Product or service quality/ selection/ features/ availability
- Innovation leadership
- Low cost/ efficiency
- Intimate customer relationship/ experience

**Component 5 (economic factors): How do we make money? (select one from each set)**

- Pricing and revenue sources: fixed/ mixed/ flexible
- Operating leverage: high/ medium/ low
- Volumes: high/ medium/ low
- Margins: high/ medium/ low

**Component 6 (personal/investor factors): What are our time, scope, and size ambitions? (select one)**

- Subsistence model
- Income model
- Growth model
- Speculative mode

Each of the six components addresses three specific levels of decision making: (1) the foundation level; (2) the proprietary level; and (3) the rules level. The *foundation level* helps the entrepreneur to identify what his business is and what it is not. The *proprietary level* focuses on developing unique combinations between decision variables, such as customer satisfaction and resource, time, and cost constraints, that results in a competitive advantage and helps the entrepreneur to focus on how value can be created in each of the six components. The *rules level* guides the entrepreneur in executing the decisions made in levels one and two.

This framework will aid first economy organisations to determine their position on the spectrum by characterising the ED start-ups they plan to develop as will be illustrated in Chapter 3.

## 2.4 Conclusion

Although there is no widely accepted definition for a business model, Morris and Allen (2005) propose an integrative definition of a business model which clarifies the purpose and function of a business model. In Chapter 2 the three unique business models were developed by integrating the design of each model into different frameworks and operational tools found in the literature. The purpose and function of each framework is discussed, as well as the way in which it will be applied to this project. The AC business model describes the necessary steps to create a start-up and is developed by looking at the cost drivers of a business model. The SC business model is developed by focusing on the relationships between different components of a business model and the NC business model is developed by looking at the processes that some of South Africa's leading ED companies use to formulate ED strategies and allocate EDFs on behalf of organisations and describes the necessary steps and requirements of the outsourcing procedure. In Chapter 3 these conceptual models will be analysed by applying the models to a case study.

## Chapter 3

# Application and analysis of the conceptual models

In Chapter 3 the three unique business models, which were developed in Chapter 2, will be analysed by applying the newly developed models to a case study. First, the All Control (AC) business model, followed by the Some Control (SC) and No Control (NC) business models, will be applied and analysed. Finally, the Chapter will conclude how first economy organisations can decide on a business model that best fits their policies and objectives by using the characterisation framework represented and discussed in section 2.3.

Any hotel consists of many departments which operate within the hotel. Examples of such departments include the housekeeping department, the front office, the maintenance department, and the food and beverages department, to name only a few. The hotel should aim to develop a start-up which will be able to operate within one of these departments. For illustration purposes, a case study will be done on a maintenance start-up for a hotel.

### 3.1 The AC business model

#### 3.1.1 Needs analysis

Potential customers of the maintenance start-up include: (1) the hotel developing the maintenance start-up; and (2) other hotels, lodges, and guest houses operating in the nearby area of the maintenance start-up. The needs of these potential customers include the following:

1. general maintenance, repairs, and cleaning;
2. basic carpentry such as cladding, repairing, and replacing roof structures;
3. basic plumbing such as installing control valves and installing and maintaining drainage systems;
4. basic electrical such as installing or replacing an earth leakage unit in a low voltage circuit;
5. painting and decor such as applying industrial protective coatings; and
6. health and safety such as replacing corner guards and making a surface non-slippery.

The customers will decide whether they want to make use of the start-up's services by looking at the quality of services they receive, the rates charged for the services, as well as the availability and range of services.

At this point it should be noted that the hotel developing the maintenance start-up will serve as the primary customer of the start-up. This statement is, and will always be, valid as start-ups will be developed as an Enterprise Development (ED) activity. The entrepreneur should therefore focus to keep the hotel satisfied at all times. For illustration purposes, other hotels operating in the nearby area of the hotel developing the maintenance start-up will serve as the secondary customers of the start-up.

Maintenance services are required on a regular basis and form a part of a hotel's everyday needs and common activities. Therefore, one can conclude that there is a definite need for a maintenance start-up.

### 3.1.2 Feasibility study

In the analysis of the feasibility of the maintenance start-up, some of the questions asked in the framework were not completed as some of these questions are irrelevant to the case study and/or are not within the scope of this project. Appendix A includes a detailed financial analysis for different scenarios of the start-up. The calculations made in this analysis were used to answer some of the questions in the *Financial feasibility* section of the feasibility study as well as other financial related factors in the AC model.

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#### Technical feasibility — Is it doable?

1. *Is the technology for the product or service already available, or is it still in development?* The technology (tools and equipment) is already available.
2. *If it is already available, is anyone else using it to develop the same product or service as you? If so, who are they and how does that affect your prospects?* Yes, there are many other maintenance businesses using the same tools and equipment to perform their maintenance services. This makes the barriers to enter the maintenance industry low.
3. *What kind of entry barriers does your technology provide?* An entrepreneur needs the necessary capital to acquire the resources to perform the maintenance services.
4. *List reasons why the end user might not want to use your technology, even though your product or service may be technologically superior.* The end users (the customers) may be uncertain about the quality and reliability of services that the entrepreneur of the start-up will offer.

#### Market feasibility — Is there a need?

1. *What exactly will you be selling?* The start-up will sell its maintenance services. *What is your value proposition?* Reliable and quality services will be delivered at low rates.

2. *Who is your customer?* The primary customer is the hotel developing the maintenance start-up. Other customers include hotels in the nearby area where the hotel, developing the start-up, operates. *Describe a typical profile.* Every hotel consists of many departments, including a maintenance department. Maintenance activities form a part of a hotel's common needs and everyday activities.
3. *What is the customer's need?* The customers require reliable and quality maintenance services in order to keep their customers, such as tourists, satisfied.
4. *How is the need currently being filled?* Each hotel has its own maintenance department.
5. *Who or what is the competition?* The maintenance departments of the hotels and other maintenance businesses. *What are the advantages and disadvantages of your service over the competition?* The maintenance start-up will be developed for an entrepreneur who works in the hotel's maintenance department and already has the necessary skills to perform maintenance services. Therefore, an advantage is that the entrepreneur will be familiar with the hotel industry.

#### **Financial feasibility — Is it profitable?**

1. *What are the sources of revenue for the business?* The start-up's revenue sources are its primary customers (the hotel developing the start-up) and other hotels in the nearby area. *What will the customer pay per transaction?* A service rate of R60/hour and R80/hour will be charged for maintenance services during working hours and after working hours, respectively.
2. *How many transactions will you do in a day, week, month or year?* Approximately five transactions per day.
3. *What are the major costs for the new business?* The major costs of the new business include the capital required in order to create and develop the start-up (once-off start-up expenses) and other monthly costs for operating the start-up (ongoing monthly expenses). *What is the nature of those costs — fixed, variable or semi-variable?* The once-off start-up expenses are fixed while the ongoing monthly expenses are variable.
4. *What size capital investment is required to launch and sustain the business?* Approximately R80, 000.
5. *How is the financial health of the business affected by the timing of cash flows — when revenue will be collected and when costs will need to be paid?* The start-up will immediately collect its revenues after the maintenance services were delivered. Costs incurred will be paid at the end of each month.
6. *How long will it take the business to break even?* Approximately 3 years.

#### **Team skills and desire — Do we want to do it?**

1. *Why are you or your team likely to be more successful in this business than others?* The entrepreneur for whom the start-up will be created for is determined, motivated, and enthusiastic. He is also sees the bigger picture and are able to solve problems himself.

2. *What are your relevant weaknesses and how will you overcome or compensate for them?* The entrepreneur has no skills whatsoever of how a business should be operated. The hotel developing the start-up can help the entrepreneur to obtain these skills by mentoring and supporting him on how he can run his maintenance start-up.
  3. *Why do you want to do this — really?* The hotel has an opportunity to integrate the concept of ED into their Corporate Social Responsibility (CSR) strategy. Furthermore, the hotel can create opportunities for enhancing operational benefits while simultaneously fulfilling Black Economic Empowerment (BEE) requirements.
- 

The answers obtained in the feasibility study of the maintenance start-up prove that the maintenance start-up will be a valuable opportunity worth investing in. Therefore the next step of the AC business model, identifying the cost drivers of the start-up, can be done.

### 3.1.3 Cost drivers

The following paragraphs illustrate and discuss the drivers that will drive the cost of the maintenance start-up.

**Positions** Although four different types of possible customers were identified in the needs analysis, the maintenance start-up will, for illustration purposes only, segment itself in the hotel market by focusing on hotels as its customers. Subsequently, the position of the start-up is determined by using Porter's Five Forces model:

1. The *bargaining power of customers* — the level of bargaining power that the maintenance start-up's customers (the hotels) will have over the start-up is driven by the number of customers that the start-up will have and the type of services that the start-up will offer to its customers. Strong customers may use their bargaining power to play the start-up off against its competitors so they can get lower prices or better quality at the same price. However, because the maintenance start-up will focus to deliver reliable and quality maintenance services and charge low rates, the start-up's customers will have little bargaining power over the start-up.
2. The *threat of new entrants to your industry* — there already exists numerous maintenance businesses in the industry and, because each hotel has its own maintenance department, the maintenance start-up should find a way to make the use of its services worthwhile.
3. The *bargaining power of your suppliers* — each hotel has its own maintenance department. Therefore, they will be able to operate without the start-up's services and have bargaining power over the start-up.
4. The *threat of substitute services* — the customers of the maintenance start-up will easily be able to find maintenance services which they can substitute the start-up's services with.

5. *Rivalry amongst existing businesses* — there are numerous maintenance businesses available to customers requiring maintenance services. These businesses can take the customers of the maintenance start-up if they are able to provide better services and rates to customers.

**Activities** The business activities of the maintenance start-up were determined by focusing on the maintenance needs of a hotel and are listed under the needs analysis in section 3.1.1. These activities, *which* the maintenance start-up will perform, are expanded on Tables 3.3 and 3.4 and can also be broken down into smaller activities in order to show the entrepreneur *how* he should perform his maintenance services. Table 3.1 provides a simple example of how this can be done (detailed examples are represented in Tables 3.5 and 3.16 in Appendix B).

Table 3.1: *How* business activities can be broken into smaller pieces

<b>Steps you should take when inspecting and servicing guest room AC units</b>	<b>How</b>	<b>Things to take note of</b>
Inspect filter	Unplug AC unit, remove the AC unit grill or front, and inspect the filter for excessive dirt and dust	Some AC units in guest rooms may have grills that are screwed on while the others may be attached with the use of clips

A Service Level Agreement (SLA) should be compiled by the hotel in order to show the entrepreneur *when* to perform business activities and how frequently it should be performed. The SLA will also help the hotel developing the start-up to enforce the required maintenance services. Table 3.17 illustrates an example of a how this can be done (a detailed example is given in Table 3.17 in Appendix B).

Table 3.2: SLA for the maintenance start-up

<b>Business activity to be performed as part of the SLA</b>	<b>Including</b>	<b>When</b>
Cleaning	Cleaning and testing the pool	The pool should be cleaned at least twice a month

Table 3.3: The business activities *which* the maintenance start-up will perform (continued on next page)

Maintenance section	Business activity of maintenance section	Including...
<b>General maintenance, repairs, and cleaning</b>	Perform preventative maintenance to guest rooms	Inspection of interior doors, lights, walls, closets, air conditioning (AC) units, heating systems, windows and coverings, and ceilings
	Perform repairs to guest room furniture	Repairing of damaged or broken furniture
	Inspect and service guest room AC unit	Inspection of AC unit filters, drain pans and drain lines, fan blowers, and fan motors
	Perform interior installations	The installation of curtain rods, venetian blinds, window shades, and pictures
	Perform preventative maintenance of public areas	The inspection of building exteriors, the lobby, and the vending area
	Perform repairs to ceramic tiles and grout	
	Clean and test pool	The skimming of the pool's surface, cleaning the pool's walls and pool filters, vacuuming the pool, inspection of pool markings for visibility and legibility, inspection of pool safety and life saving equipment for damage or water
	Clean and paint hotel signs	
	Perform preventative maintenance on roofs	Waterproofing
	Replace ceiling tiles	
Perform pressure washing		
<b>Basic carpentry</b>	Basic carpentry repairs	The finishing of unfinished wood
<b>Basic plumbing</b>	Replace sink in guest room	
	Change shower head	
	Repair wash basin drain	
	Repair faucet leaks and drips	
	Fix a leaking stopper	
	Service or repair toilet	Fixing of running toilet, unclogging a toilet, replacing a broken toilet handle, fixing loose toilet seats, and completing toilet repairs

Table 3.4: The business activities *which* the maintenance start-up will perform (continued from previous page)

<b>Maintenance section</b>	<b>Business activity of maintenance section</b>	<b>Including...</b>
<b>Basic electrical</b>	Install ceiling fan	
	Replace light bulbs	
	Inspect power supply after power failure	
<b>Painting and decor</b>	Replace mirror	
	Repair door hardware	
	Repair damaged carpet	
	Apply or repair wallpaper	
	Repair drywall	
	Paint walls and other surfaces	
<b>Plant and machinery</b>	Maintain and repair ice machines	The servicing of ice machine condensing units, compressors, and circulating systems
	Perform visual check of air compressor	The inspection of the oil level in the compressors, and releasing any accumulated dirt or grease from the output filters
	Inspect flood pump	
	Service sump pump	
	Perform water valve maintenance	
	Test water heater	
	Perform basic generator service	
	Troubleshoot vacuum cleaner	
	Maintain and service laundry equipment	The maintenance of daily and seasonal dryers and monthly washers
	Inspect laundry carts	Testing the wheels to make sure they are in good working conditions, checking the condition of casters and hitches, and checking the wire frames of the laundry carts
<b>Health and safety</b>	Make a surface skid-free (non-slippery)	
	Replace corner guards	

**Industry factors** As soon as the maintenance start-up is operative, *competitive forces* will be exerted by potential competitors. Maintenance businesses usually offer basic services and require little training in order to be able to perform these services. Therefore barriers to enter the maintenance industry are very low and increase the chances of rivals and potential new entrants to exert competitive forces.

Numerous maintenance businesses are available to customers who require maintenance services. As a result customers have more bargaining power which forces the entrepreneur to charge low rates. *Cooperative forces* are established between the hotel developing the start-up and the maintenance start-up when the start-up is developed as an enterprise development activity.

**Resources** The resources that the entrepreneur of the maintenance start-up will need in order to perform the business activities include (1) a vehicle; (2) tools and equipment; (3) a cellphone; and (4) a place where he can run his start-up from. The value, quality, and profitability potential of these resources are assessed by using the Value, Rareness, Imitability, Substitutability, and Appropriability (VRISA) analysis represented in Table 3.5.

Table 3.5: VRISA analysis of the maintenance start-up's resources

Attribute	Key Question	Answer
<b>Value</b>	Will the resources which the entrepreneur need provide customers with something that they value?	Yes. The entrepreneur needs these resources in order to operate his start-up and deliver his maintenance services.
<b>Rareness (uniqueness)</b>	Is the entrepreneur the only one with this resource? If not, is its level of the resource higher than that of competitors?	No. There are many other maintenance businesses using the same resources to perform their services.
<b>Imitability</b>	Is it easy for other firms to imitate the entrepreneurs skill advantage?	Yes. Other firms can easily obtain these resources to perform maintenance services.
<b>Substitutability</b>	Can another resource offer customers the same value that the entrepreneur's skills do?	Yes. The maintenance activities can easily be performed by any other maintenance business.
<b>Appropriability</b>	Will the entrepreneur make money by using his skills?	Yes. He has the experience and expertise.

Because the entrepreneur does not have any skills whatsoever of how a business should be operated, he should receive training on how this can be done (This will be the case in most of the start-ups which first economy organisations aim to develop for people of the second economy). The entrepreneur can obtain the necessary skills on how to operate a business on one of two ways: (1) in-house training; and (2) institutional training.

In the in-house training option, the hotel developing the maintenance start-up can develop a training program which they can use to train and mentor the entrepreneur on how to operate a business. The entrepreneur can, for example, be trained on how to use systems such as computers, printers, and facsimile machines. The disadvantages of training the entrepreneur in-house are that the hotel will not be able to present the entrepreneur with a diploma, which may lead to imbalance between small and large organizations; and also that this method of training will require a lot of manpower time. The main advantage is that the entrepreneur will receive his training in the environment he will operate in.

In the institutional training option, the entrepreneur receives his training from an institution. The entrepreneur can, for example, obtain his business management skills by enrolling for a business management course at a college such as *Intec College*. The college awards students with a national qualification diploma (NQF5) and includes a South African Institute of Management (SAIM) Business Management certificate.

A detailed financial analysis for different scenarios of the start-up are provided in Appendix A. In this analysis the cost drivers of the maintenance start-up are also taken into account. The final step of the AC business model process, identifying and developing a strategy for sustainability growth, can now be done for the maintenance start-up.

### **3.1.4 Strategy**

The strategy of the maintenance start-up was developed by using the entrepreneurial strategy-making process discussed under the AC business model in the literature study. Accordingly the following strategy is proposed:

The maintenance start-up will offer a wide range of maintenance services to its customers. The start-up's market is segmented into hotels. The start-up will differentiate itself from other maintenance businesses by offering its maintenance services to hotels. The start-up will competitively position itself in the market by offering a wide range of maintenance services at low rates and will emulate to create an image of operational excellence, consistency, and dependability by foreseeing customers in all their maintenance needs. Every customer will be treated as if he/she is the most important customer of the maintenance start-up.

Although the AC model covers most of the aspects which should be looked at when developing a start-up, there are other factors, such as managing and planning business finances, that should also be given attention to. Appendix A provides an example of how this can be done.

## **3.2 The SC business model**

The SC business model is analysed in the same format as that in which it was developed. The format are as follows: (1) people; (2) structure; (3) systems and processes; and (4) performance and are used to analyse the model by application to the maintenance start-up case study.

For illustration purposes, an university (specifically the Industrial and Systems Engineering department) will be used as an example to illustrate the possible roles and responsibilities that an

institution should take when partnering with first economy organisations for the development of the second economy start-ups.

**People** The different types of people who will play a role in the maintenance start-up case study include:

1. graduate and postgraduate students from the Industrial and Systems Engineering department of a university (an engineering department may, for example, include graduate or postgraduate students with either a BEng, MEng, or PhD degree);
2. the hotel developing the start-up; and
3. the entrepreneur for whom the start-up is created for.

The Industrial and Systems Engineering department, together with the hotel developing the maintenance start-up, should be responsible for training and mentoring the entrepreneur to effectively operate his maintenance start-up and help him to deliver reliable maintenance services to the hotels. The entrepreneur of the maintenance start-up will be responsible for delivering the maintenance services to its customers (the hotel developing the start-up as well as other hotels operating in the nearby area of the hotel developing the start-up).

**Structure** The maintenance start-up will make use of a project structure for the reason that a project structure organises people according to projects they are working on and enables interaction between people.

**Systems and processes** The Industrial and Systems Engineering department can, for example, develop systems which the entrepreneur can use to operate his start-up and that will help him to deliver the reliable maintenance services that hotels require. Example of such systems include: (1) a database which the entrepreneur can easily use to do the accounting of his start-up; or (2) a program which the entrepreneur can use to determine the shortest route he can take to a hotel when they require his maintenance services. These systems should be developed in such a way that the entrepreneur will easily understand and be able to use it on his own.

Because an university is also seen as a research institution, the Industrial and Systems Engineering department can use the grant funding that the government provides for R&D and the 150% tax benefit to develop these systems.

**Performance** The balanced scorecard could be used to measure the behavioural and performance measures of the maintenance start-up. The customer, internal, and innovation and learning perspectives are measured by focusing on service delivery, quality, and cost as decision variables for the maintenance start-up's services and are illustrated in Table 3.6.

Table 3.6: Behavioural and performance measures of the maintenance start-up

<b>Decision variable</b>	<b>Customer perspective</b>	<b>Internal perspective</b>	<b>Innovation perspective</b>
<b>Service delivery</b>	Emulate to create an image of operational excellence, consistency, and dependability by foreseeing customers in all their basic maintenance needs	Maintain image of image of operational excellence, consistency, and dependability	Serve and continue to satisfy customers in all their maintenance needs
<b>Quality</b>	Perform quality maintenance services. If a service can't be performed, a contractor should be called who will be able to perform the required service	Offer as much basic maintenance services as possible	Maintain continuous improvement on maintenance services
<b>Cost</b>	Competitive positioning by charging lower rates for maintenance services than competitors	Maintain competitive position by charging lower rates than competitors	Maintain competitive position by charging lower rates than competitors

### 3.3 The NC business model

The first step that the hotel needs to take when they decide to develop the maintenance start-up by using the NC business model, is to submit the maintenance start-up project at Innovation Franchise Concepts (IFC). If IFC accepts the project, the hotel should decide on one of the investment options for their Enterprise Development Funds (EDFs).

For the maintenance start-up case study the upward flow investment option should be chosen. The hotel (*the contributor*) can invest in a supply chain to the entrepreneur (*the beneficiary*) by investing in the entrepreneur as a supplier, who can supply the hotel with the maintenance services they require. The hotel can either supply the necessary funds or the actual resources (tools and equipment, a vehicle, a cellphone, and a place where the entrepreneur can operate his start-up from).

According to the calculations made in Appendix A the cost for developing a start-up is approximately R80,000. Therefore, an investment of R80,000 plus a 15% contribution will be required for the development of every maintenance start-up franchise.

### 3.4 Deciding on a business model

The characteristics obtained for the maintenance start-up by using the characterisation framework, which was illustrated and discussed in section 2.3, can be used by the hotel to decide on one of the conceptual business models represented on a spectrum. This decision should be based on the

policies and objectives of the hotel and by looking at the Return On Investment (ROI) of each business model. The AC business model's ROI includes: (1) full points towards the Broad Based Black Economic Empowerment (BBBEE) scorecard; and (2) cost savings. The SC business model's ROI includes: (1) full points towards the BBBEE scorecard; and (2) time and resource savings. The NC business model's ROI includes: (1) distribution control; (2) special marketing campaigns; and (3) full points towards the BBBEE scorecard.

If the hotel has manpower available to develop the maintenance start-up and train and mentor the entrepreneur, the AC business model should be used. If the hotel does not have a lot of manpower time available but would still like to be involved in the development of the maintenance start-up, the SC business model should be used. If the hotel has no manpower time available and does not want to be involved in the development of the maintenance start-up, the NC business model should be used.

### **3.5 Conclusion**

In Chapter 3 the three unique business models were analysed by applying the models to a case study for a maintenance start-up of a hotel. The AC model illustrated how the hotel can develop a start-up by following the sequential process discussed in Chapter 2. The SC model illustrated how start-ups can be developed by partnering and entering into contractual agreements with institutions such as universities. The NC model illustrated how the necessary steps of the outsourcing process should be followed when a start-up ED activity is outsourced.

Finally, Chapter 3 illustrated how first economy organisations, such as the hotel developing the maintenance start-up, can decide on one of the three conceptual business models represented on a spectrum. This decision can be made by looking at an organisation's policies and objectives, as well as the ROI that each model provides. The AC business model's ROI includes: (1) full points towards the BBBEE scorecard; and (2) cost savings. The SC business model's ROI includes: (1) full points towards the BBBEE scorecard; and (2) time and resource savings. The NC business model's ROI includes: (1) distribution control; (2) special marketing campaigns; and (3) full points towards the BBBEE scorecard.

Table 3.7: Characteristics of the maintenance start-up

Component	Foundation level	Proprietary level	Rules
Component 1: Factors related to the offering	<ul style="list-style-type: none"> <li>▪ Sell services only</li> <li>▪ Service range: standardized offering</li> <li>▪ Specialisation: narrow line</li> <li>▪ Sell services by itself</li> <li>▪ Internal service delivery</li> <li>▪ Direct distribution</li> </ul>	<ul style="list-style-type: none"> <li>▪ The maintenance services are offered to organizations within the tourism and hospitality industry in the Hatfield, Pretoria area</li> <li>▪ If the entrepreneur is unable to perform a service he will call a contractor to fix the problem</li> </ul>	<ul style="list-style-type: none"> <li>▪ The primary customer has preference of the maintenance services</li> <li>▪ The handyman should perform the hotel's preliminary maintenance requirements</li> <li>▪ The primary customer's maintenance services should be performed according to a Service Level Agreement (SLA)</li> </ul>
Component 2: Market factors	<ul style="list-style-type: none"> <li>▪ Type of organization: B2B</li> <li>▪ Regional</li> <li>▪ Position of customer in value chain: final customer</li> <li>▪ Niche market</li> <li>▪ Transactional and relational</li> </ul>	<ul style="list-style-type: none"> <li>▪ The maintenance start-up offers various maintenance services to customers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Maintenance services offered by the start-up is at a basic level</li> </ul>
Component 3: Internal capability factors	<ul style="list-style-type: none"> <li>▪ Production or operating services</li> </ul>	<ul style="list-style-type: none"> <li>▪ The maintenance services are available 24/7</li> </ul>	<ul style="list-style-type: none"> <li>▪ The entrepreneur should see to it that a customer's problem gets fixed when he is unable to perform the required service.</li> </ul>
Component 4: Competitive strategy factors	<ul style="list-style-type: none"> <li>▪ Image of operational excellence, consistency, and dependability</li> <li>▪ Service quality</li> <li>▪ Low cost and efficiency</li> <li>▪ Intimate customer relationship</li> </ul>	<ul style="list-style-type: none"> <li>▪ Differentiation is achieved by creating intimate customer relationships by calling a contractor who will fix a problem that can't be fixed by the entrepreneur</li> <li>▪ Services are charged at competitive low rates</li> </ul>	<ul style="list-style-type: none"> <li>▪ Since the maintenance services offered by the start-up are very basic a service rate lower than that of competitors should be charged</li> </ul>
Component 5: Economic factors	<ul style="list-style-type: none"> <li>▪ Pricing and revenue sources: mixed revenue sources</li> <li>▪ Operating leverage: low operating leverage</li> <li>▪ Volumes: high volumes</li> <li>▪ Margins: low margins</li> </ul>	<ul style="list-style-type: none"> <li>▪ Efficient and consistent level of services combined with low charges</li> <li>▪ The hotel and other nearby hotel's and guest houses will serve as the primary and secondary customer(s) of the start-up, respectively</li> </ul>	<ul style="list-style-type: none"> <li>▪ Maintain low rates charged for services</li> <li>▪ Advertisements of services should be done on a frequent basis</li> <li>▪ Maintain high volumes of service in order to ensure sustainability</li> </ul>
Component 6: Growth/ exit factors	<ul style="list-style-type: none"> <li>▪ Income model</li> </ul>	<ul style="list-style-type: none"> <li>▪ Emphasis on income opportunities that are consistent with the business model</li> </ul>	<ul style="list-style-type: none"> <li>▪ Focus on the sustainability of the start-up</li> </ul>

## Appendix A

Appendix A provides a detailed financial analysis for different scenarios of the maintenance start-up. The analysis was done in order to clarify certain aspects of the application of the business models to the case study and to illustrate how first economy organisations can plan and manage the finances of start-ups.

Due to the fact that this project is not based on facts and supporting data, but rather on concepts, a few “callings” had to be made in order to eliminate insecurity and simplify evaluation matters. These callings include the following:

1. the entrepreneur does not have the necessary skills to operate a business and will operate as a sole proprietor; and
2. objects such as light bulbs and air conditioning filters are provided by the customers themselves.

The following section discuss the aspects which the hotel should give attention to when they develop the maintenance start-up (or any other start-up).

### Planning and managing business finances

In order to plan and manage the business finances of the start-up, two price elements should be determined: (1) *cost price*; and (2) *sales price*. After these elements have been determined and quantified, an analyses can be done for the income and expenditures which the start-up may incur on a monthly basis.

**Cost price** First, the entrepreneur should establish the cost price for delivering the maintenance services. This can be done by identifying all the costs that contribute to the total cost of delivering the maintenance services such as: (1) the fuel consumption cost; (2) the wear and tear cost; and (3) phone call cost. These costs are illustrated and expanded on in Table 3.8 and were determined by using the following assumptions:

- The maintenance vehicle has a fuel consumption of  $14\text{km}/\ell$  and a total fuel tank capacity of  $50\ell$
- A phone call from the entrepreneur to a contractor will never exceed 1 minute and call charges will always be R2.70/minute
- The radius of the local region, wherein the maintenance start-up will operate, will never exceed a distance of 15 km

For calculation purposes a fuel price of R8.00/ $\ell$  will be used. The fuel consumption calculations were based on the above assumptions and were calculated as follows:

Let:

- $P$  = the fuel price (R8.00/ℓ)
- $Cp$  = the fuel tank capacity of the maintenance vehicle (50ℓ)
- $C$  = the maintenance vehicle's fuel consumption (14km/ℓ)

The fuel consumption cost, which the entrepreneur will incur in order to deliver the maintenance services, is determined as follows:

$$P / C = (\text{R}8.00/\ell) / (14\text{km}/\ell) = \text{R}0.57/\text{km}$$

Table 3.8 summarises the necessary costs incurred in order to deliver the maintenance services.

Table 3.8: Cost price elements of the maintenance services

Reason for cost	Cost price per unit
Fuel consumption	R0.57/km
Wear and tear	R0.50/km
Phone calls	R2.70 per minute

**Sales price** After the cost price of the maintenance services has been determined, the sales price should be determined. The sales price is the price at which the entrepreneur will sell his services to customers and will be referred to as the service rate. The service rate should at least cover all costs for the start-up to be viable (other possible expenses which the start-up may incur are discussed in the following subsection). For calculation and illustration purposes a service rate of R60/hour and R80/hour will be charged during working hours and after hours, respectively.

**Other expenses** Other expenses which the maintenance start-up may incur include: (1) the once-off start-up expenses; and (2) the ongoing monthly expenses. These expenses are illustrated in Table 3.9 followed by a discussion of how some of these expenses can possibly be incurred. First, the once-off start-up expenses are discussed.

1. Advertising. The start-up's services have to be advertised before the start-up opens. Advertising the services will attract customers and help the entrepreneur to build a strong client basis. There are many hotels in the area which the maintenance start-up will operate including the *Manhattan Hotel*, *Hotel 224*, *SBH Hotel*, *Holiday Inn Express*, *Protea Hotel Hatfield*, *Sheraton Pretoria Hotel*, *Arcadia Hotel*, *City Lodge*, and *Garden Court Hatfield*, to name only a few. The maintenance services should be advertised to these hotels as they will serve as the possible customers of the maintenance start-up. The hotel can help the entrepreneur to advertise his services by sending e-mails and

Table 3.9: Other expenses which the start-up may incur

Start-up expenses	Ongoing monthly expenses
Advertising	Advertising
Training	Bank service fees
Resources	Cellphone fees
Cellphone subscription	Insurance
Unanticipated expenses	Loan payments
Cash	Professional fees

flyers or by inviting customers to attend a presentation in which the purpose, function, and services of the maintenance start-up will be explained in more detail. Advertising the start-up's services on this way will minimize advertising costs and will therefore be neglected.

2. Training. The entrepreneur can obtain his business management skills on one of two ways: (1) in-house training; and (2) institutional training. In this case study it will be assumed that the entrepreneur will obtain his business management skills from the hotel who develops the start-up (in-house training). When the entrepreneur of the maintenance start-up receives in-house training, training costs will be minimised and can therefore be neglected.
3. Resources. The basic resources that the entrepreneur needs to perform the maintenance services are: (1) a maintenance vehicle; (2) tools and equipment; (3) a cellphone; and (4) a place where he can operate his start-up from. It will be assumed that an amount of R50,000 will be needed to buy a vehicle, an amount of R10,000 will be needed to buy the necessary tools and equipment, and that an amount R300 is needed to by a prepaid cellphone. If the hotel developing the maintenance start-up will be able to provide the entrepreneur with a place where he can operate his business from, then this cost can also be neglected.
4. Unanticipated expenses. For illustration purposes an amount of R1,000 will be used for unanticipated expenses.
5. Cash. The entrepreneur needs capital in order to obtain the necessary resources and equipment to perform the maintenance services, to cover the cost of unanticipated expenses, and to have a cash flow in the start-up's bank account. The entrepreneur can obtain this capital by applying for a business loan from a bank or a development organization such as the Industrial Development Corporation (IDC), or the hotel developing the start-up can provide the entrepreneur with the necessary capital. Banks, such as First National Bank (FNB), offer various business financing solutions including: (1) business loans; (2) commercial property finance; and (3) leveraged finance. In this case study, the business loan option will be the most appropriate financing solution for the maintenance start-up. The business loan is a "medium-to long-term loan which is used primarily to fund projects for growing businesses" and is intended for businesses that have "the capacity to service the loan repayment obligations out of existing cash flow"

(Bank, 2010). The approbation of the business loan depends on the number of transactions which the entrepreneur incur within a period. It will be assumed that a business loan of R80,000 will be needed to create and develop the maintenance start-up.

The following table (Table 3.10) provides a summary of the once-off start-up expenses discussed above.

Table 3.10: Summary of the once-off start-up expenses

<b>Start-up expense</b>	<b>Amount</b>
Advertising	Neglected
Training	Neglected
Maintenance vehicle	R50,000
Tools and equipment	R10,000
Cellphone	R300
Unanticipated expenses	R1,000
Cash	R80,000

The following points discuss the ongoing monthly expenses represented in Table 3.9.

1. Advertising. The ongoing monthly advertising expenses can be incurred in the same way as the once-off start-up advertising expenses and can therefore be neglected.
2. Bank service fees. It will be assumed that an amount of R150 will be paid for monthly bank services.
3. Cellphone fees. The entrepreneur's monthly cellphone fees depend on the amount of times and the duration of calls. These costs were calculated by looking at different scenarios: (1) an optimistic scenario; (2) a realistic scenario; and (3) a pessimistic scenario. These scenarios are illustrated under subsection 3.5. For illustration purposes the optimistic scenario's monthly cellphone fee (R61.34) will be used.
4. Insurance. It will be assumed that the maintenance start-up's monthly insurance cost will be R1500.
5. Loan payments. The loan payments that the entrepreneur has to pay depend on the following factors: (1) loan amount; (2) annual interest rate; and (3) loan term. Table 3.11 illustrates the different monthly payments (payback periods) that the entrepreneur will have to pay for different loan amounts. Calculations are based on an annual interest rate of 12% over periods of 36, 48, and 60 months. Because it a decision was made that R80,000 will be required to buy the necessary resources, a loan amount of R2,656.80 will be paid per month by the entrepreneur for 36 months.
6. Professional fees. The maintenance start-up has to be able to provide financial statements to whoever requires it. Therefore the cost of professional fees has to be incorporated into the start-up's ongoing monthly expenses. FNB offers free accounting services for their customers with their *Instant Accounting* service. Instant accounting is "an easy-to-use, integrated and instant accounting solution, which uses your FNB electronic

bank statement to do your bookkeeping automatically every night” (Bank, 2010). The service provides valuable insight to customers regarding their business’ cash flow, income, and expenditures. If the entrepreneur opens an account at FNB he will not have to incur the monthly costs for professional fees.

Table 3.11: Monthly installments for different loan amounts

<b>Annual interest rate</b>	12%	12%	12%
<b>Payback period (months)</b>	36	36	36
<b>Loan amount</b>	R80,000	R85,000	R90,000
<b>Montly installment</b>	R2,656.80	R2,822.85	R2,988.90

The following table (Table 3.12) provides a summary of the ongoing monthly expenses discussed above.

Table 3.12: Summary of the ongoing monthly expenses

<b>Ongoing monthly expense</b>	<b>Amount</b>
Advertising	Neglected
Bank service fees	R150
Cellphone fees	R61.34
Insurance	R1500
Loan payments	R2,656.80
Professional fees	Neglected

**Income and profit** The income and profit of the maintenance start-up was determined by looking at three different scenarios: (1) an *optimistic* scenario; (2) a *realistic* scenario; and (3) a *pessimistic* scenario. Various assumptions are made in order to compare and evaluate different outcomes of the income, profit, and expenditures for each scenario. These assumptions are presented in Table 3.13 for each scenario.

Based on the assumptions made for each of the three scenarios in Table 3.13, calculations were made for each of the scenarios. These calculations are summarised in Table 3.14.

Table 3.13: Summary of the assumptions made for the three scenarios

<b>Assumption criteria</b>	<b>Optimistic scenario</b>	<b>Realistic scenario</b>	<b>Pessimistic scenario</b>
Average distance travelled per month (km)	3	7	10
Amount of times a contractor has to be called per month	10	10	10
Number of hours worked per month (measured as a % of the total available hours to be worked)	100	75	50
Number of after hours worked per month (measured as a % of the total available after hours to be worked)	10	5	0

Table 3.14: Capital summary for the three scenarios

<b>Cost</b>	<b>Optimistic scenario</b>	<b>Realistic scenario</b>	<b>Pessimistic scenario</b>
Calling cost (per month) <b>(A)</b>	R61.34	R42.82	R24.30
Travelling cost (per month) <b>(B)</b>	R730.29	R1,189.50	R964.29
Service remuneration <b>(C)</b>	R14,576.00	R9,988.00	R5,400.00
<b>Income (per month) (C - (A+B))</b>	<b>R13,784.37</b>	<b>R8,755.68</b>	<b>R4,411.42</b>

Table 3.15: Profit summary for the three scenarios

	<b>Optimistic scenario</b>	<b>Realistic scenario</b>	<b>Pessimistic scenario</b>
<b>Income</b>	R13,784.37	R8,755.68	R4,411.41
<b>Ongoing monthly expenses (first 36 months)</b>	R4,368.14	R4,368.14	R4,368.14
<b>Ongoing monthly expenses (after 36 months)</b>	R1,711.34	R1,711.34	R1,711.34
<b>Profit (first 36 months)</b>	R9,416.23	R4,387.54	R43.27
<b>Profit (after 36 months)</b>	R12,073.03	R7,044.34	R2,700.07

## **Conclusion**

Appendix A provides a detailed example of how first economy organisations can plan and manage the finances of a start-up. First, the *cost price* and *sales price* of the start-up's products and/or services should be determined followed by the identification of all the expenditures the start-up may incur. Finally, the income and profit of the start-up can be calculated to determine whether or not the start-up will be financially feasible.

## Appendix B

<b>Steps you should take when inspecting and servicing guest room AC units</b>	<i>How...</i>	<b>Things to take note of...</b>
<b>Inspect filter</b>	<ul style="list-style-type: none"> <li>▪ Unplug AC unit</li> <li>▪ Remove the AC unit grill or front</li> <li>▪ Inspect the filter for excessive dirt and dust</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some AC units in guest rooms may have grills that are screwed on while the others may be attached with the use of clips or tab</li> <li>▪ Most AC units can accommodate both disposable and re-usable filters</li> <li>▪ Filters should be cleaned at least once a month during the warmer seasons. In areas where dust and sand is more prevalent, it may be necessary to replace or clean filters more frequently</li> </ul>
<b>Inspect the AC drain pan and drain lines</b>	<ul style="list-style-type: none"> <li>▪ Inspect the drain pan to make sure the condensation from the unit is draining properly</li> <li>▪ Remove any debris, sludge, or other kinds of build-up from the drain pipe. Wipe clean if necessary</li> <li>▪ Determine that the water is moving properly through the drain lines and supply/return lines</li> <li>▪ Check that the drain lines and the supply/return lines are free of clogs and other obstructions</li> </ul>	<ul style="list-style-type: none"> <li>▪ It may be necessary to remove the drain pipe in order to clean it. Use a cloth and running water to clear out the drain pipe</li> <li>▪ When clearing clogs in the drain pipe or lines, use a chemical approved for the prevention of legionella and other diseases developed in air conditioning and ventilating units</li> </ul>
<b>Inspect the fan blowers and motors</b>	<ul style="list-style-type: none"> <li>▪ Check that the fan blowers are functioning properly</li> <li>▪ Check that the blades are free from dust and dirt</li> <li>▪ Wipe the blades if needed</li> <li>▪ Make sure the blades are not cracked or broken</li> <li>▪ Lubricate the fan motor bearings</li> </ul>	<ul style="list-style-type: none"> <li>▪ There should be an oil port on the motor for dropping lubricant into the motor. Many newer AC units are self-lubricating and care should be taken to avoid adding oil to the casing. Consult the manufacturer to determine which type of unit you have at your hotel</li> </ul>

Table 3.16: A detailed example of *how* business activities can be broken into smaller activities (continued from previous page)

<b>Steps you should take when inspecting and servicing guest room AC units</b>	<i>How...</i>	<b>Things to take note of...</b>
<b>Check the AC unit coils</b>	<ul style="list-style-type: none"> <li>▪ Clean the coils free form debris or rust</li> <li>▪ Use a coil cleaner solution to clean the coils, if necessary</li> <li>▪ Remove and steam clean the coils if they are excessively dirty or clogged</li> <li>▪ Straighten bent coils using a coil comb</li> </ul>	<ul style="list-style-type: none"> <li>▪ The AC unit coils are also known as vacuum evaporator fins</li> </ul>
<b>Sand and prime any rusted or corroded parts of the AC unit</b>		
<b>Calibrate the AC unit thermostat according to the thermostat manufacturer's instructions</b>		
<b>Test the AC unit</b>	<ul style="list-style-type: none"> <li>▪ Plug the AC unit in and make sure that it cools properly</li> <li>▪ Clean up the work area before exiting</li> </ul>	

Table 3.17: A detailed example of a SLA

<b>Business activity to be performed as part of the SLA</b>	<b>Including...</b>	<b>When...</b>
<b>General maintenance</b>	<ul style="list-style-type: none"> <li>▪ General carpentry maintenance</li> <li>▪ General plumbing maintenance</li> <li>▪ General electrical maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Preventative maintenance should be performed to guest rooms once in every two weeks</li> <li>▪ Blocked drains should be fixed within two hours</li> <li>▪ Electrical problems should be fixed within one hour</li> </ul>
<b>Preventative maintenance</b>	<ul style="list-style-type: none"> <li>▪ Inspection of interior doors, lights, walls, closets, heating systems, windows and coverings, and ceilings</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inspection should take place on a weekly basis</li> <li>▪ Problems should be fixed immediately</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Inspection and servicing of guest room AC unit's filters, drain pans and drain lines, fan blowers, and fan mowers</li> </ul>	<ul style="list-style-type: none"> <li>▪ AC unit filters should be replaced at least once a month in warmer seasons</li> <li>▪ In areas where dust and sand is more prevalent, filters should be replaced more frequently</li> <li>▪ AC unit drain pans should be drained at least once a month</li> <li>▪ Drain lines, fan blowers, and fan mowers should be expected on a weekly basis</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Inspection on roofs - waterproofing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inspection should take place at the beginning of every rain season</li> </ul>
<b>Repairs</b>	<ul style="list-style-type: none"> <li>▪ Repairs to guest room furniture</li> <li>▪ Repairs to ceramic tiles and grout</li> </ul>	<ul style="list-style-type: none"> <li>▪ Repairs should be fixed within 1 day</li> </ul>
<b>Cleaning</b>	<ul style="list-style-type: none"> <li>▪ Cleaning and testing the pool</li> </ul>	<ul style="list-style-type: none"> <li>▪ The pool should be cleaned at least twice a month</li> </ul>

# Bibliography

- Adami, N. (2008). Sustainable development report. Available online from <http://www.sabmiller.com> (Accessed 13 March).
- Afuah, A. (2004). *Business Models: A strategic management approach*. McGraw-Hill/Irwin.
- Bank, F. N. (2010). Available online from <http://www.fnb.co.za> (Accessed 15 July).
- Christensen, C. and Overdorf, M. (2000). Meeting the challenges of disruptive change. *Harvard Business Review*, pages 67 – 76.
- De Bruyn, S. (2008). Executive Director of IFC. Available online from [www.franchiseconcepts.co.za](http://www.franchiseconcepts.co.za) (Accessed 12 August).
- Department of Science and Technology (2006). A guide to Scientific and Technological Research and Development Tax Incentives. Available online from <http://www.dst.gov.za> (Accessed 23 September).
- Fisher, G. (2009a). Finding the right business concept. Available online from <http://www.entrepreneurmag.co.za> (Accessed 11 July).
- Fisher, G. (2009b). Is it an idea or an opportunity? Available online from <http://www.entrepreneurmag.co.za> (Accessed 11 July).
- Grant, T. (2008). Executive Director of NEDA. Available online from [www.nedamin.co.za](http://www.nedamin.co.za) (Accessed 28 February).
- Hamann, R., Woolman, S., and Sprague, C. (2008). *The Business of Sustainable Development in Africa: Human Rights, Partnerships, & Alternative Business Models*. Unisa Press.
- Houdre, H. (2010). Sustainable hospitality: Sustainable development in the Hotel Industry. Available online from <http://www.chr.cornell.edu> (Accessed 10 March).
- Kirsten, M. (2006). South Africa's Second Economy. Available online from <http://www.idc.co.za> (Accessed 13 March).
- Kirsten, M. and Rogerson, C. (2002). Tourism, business linkages and small enterprise development in South Africa. *Development South Africa*, 19(1):29 – 59.
- Mayo, M. and Brown, G. (1999). Building a competitive business model. *Ivey Business Journal of Business Research*, 63(3):18 – 23.

- Morris, M., S. M. and Allen, J. (2005). The entrepreneur's business model: Toward a unified perspective. *Journal of Business Research*, 58(6):726 – 735.
- Nazzari, D. & Hillsman, C. (2010). Academia should take the lead in improving collaboration with business. *IIE magazine*, September edition:26 – 30.
- Njamela, O. (2006). Tax Incentives for Research and Development. Available online from <http://www.dst.gov.za> (Accessed 23 September).
- Porter, M. (1976). Completing a SWOT Analysis. Available online from <http://www.whatmakesagoodleader.com> (Accessed 20 September).
- Rogerson, C. (2005). Tourism SMMEs in South Africa: A case for separate policy development? Available online from <http://www.tips.org.za> (Accessed 15 March).
- Rogerson, C. (2007). Small enterprise development in South Africa's lagging regions: The case of the Mpumalanga province. *Urban Forum*, 18(1):60 – 81.
- Slywotzky, A. (1996). Value migration. Technical report, Harvard Business Review Press.
- Stark, H. (2006). *Systems Engineering and Analysis*. Prentice Hall.
- Stats, S. (2010). Gross Domestic Product: First quarter 2010. Available online from <http://www.stats.gov.za> (Accessed 18 August).
- Stewart, D. and Zhao, Q. (2000). Internet Marketing, Business Models, and Public Policy. *Journal of Business Research of Public Policy*, 19 (Fall):287 – 296.
- Strydom, J. (2007). *Entrepreneurship and How to Establish Your Own Business*. Juta & Company Ltd.
- Trade and Industrial Policy Strategies (2009). About the Second Economy: What is the Second Economy? Available online from <http://www.tips.org.za> (Accessed 15 March).
- Van Den Ende, L. (2004). Corporate Social Responsibility in South Africa: Fact or fiction. Available online from <http://www.uj.ac.za.com> (Accessed 10 March).
- Wolmarans, H. and Sartorius, K. (2009). Corporate Social Responsibility: The financial impact of Black Economic Empowerment transactions in South Africa. *South African Journal of Economic and Management Sciences*, 12(2):180 – 193.
- Zott, C. and Amit, R. (2007). Business model design and the performance of entrepreneurial firms. *Operations Research and Management Sciences*, 18(2):181 – 202.