INCUBATOR SERVICES THAT SMALL SERVICE ORGANISATIONS REQUIRE FROM A UNIVERSITY BUSINESS INCUBATOR

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2015

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I declare that:

"Incubator services that small service organisations require from a university business incubator"

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

R. Diedericks
October 2015
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LETTER FROM THE LANGUAGE EDITOR

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To whom it may concern

This is to confirm that I, the undersigned, have language edited the completed research of Rita Diedericks for the PhD thesis entitled: *Incubator services that small service organisations require from a university business incubator*.

The responsibility of implementing the recommended language changes rests with the author of the thesis.

Yours truly,

Linda Scott

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Rita Diedericks
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ABSTRACT

INCUBATOR SERVICES THAT SMALL SERVICE ORGANISATIONS REQUIRE FROM A UNIVERSITY BUSINESS INCUBATOR

Keywords: business incubator, incubator services, entrepreneurship, small service organisations, marketing

Over the past two decades, the South African economy has witnessed a decrease in its capacity to recruit new entrants into the formal labour market. South Africa's economy is not producing enough employment opportunities to accommodate the influx of annual new entrants into the labour market, such as school leavers. As a result of the inadequate ability of South Africa's formal labour market to absorb new entrants, coupled with the rising youth unemployment, the South African government has prioritised the development of small, medium and micro enterprises (SMMEs) and entrepreneurship as a means to combat these challenges.

Entrepreneurship, as a recognised intervention for the development and growth of an economy through the creation of jobs and poverty alleviation, is an important topic in business literature. Many countries around the world are increasingly recognising the significant contributions that SMMEs make to the employment and income generation aspects of the economy. Despite the contributions that SMMEs and small organisations (SOs), including small service organisations (SSOs), make to the economy, they have multiple difficulties to overcome. While SOs are viewed as powerful mechanisms that contribute to economic development and growth through increasing employment opportunities and wealth, they face certain obstacles that impede their growth potential and, sometimes, even lead to failure.

Business incubators are organisations established to support SOs and SMMEs and are recognised as making a significant contribution to reducing business failure. South Africa and countries all over the world are beginning to appreciate the value of incubators as salient institutions that support small organisations. Various forms of business incubators have been developed, including university business incubators

(UBIs) which provide support for potential entrepreneurs through ensuring that mentoring, financing, networks and business training is available. Business incubators offer incubation programmes, which include a variety of services and networking resources, to incubatees. Whilst numerous studies have been done on the services that incubators offer incubatees in the international context, limited research has been conducted on the services that entrepreneurs require from a UBI in the South African context.

The primary objective of this study was to determine the essential incubator services that small service organisations require from UBIs within the South African context in order to guide the formation of policy objectives, marketing strategies and marketing procedures.

The target population relevant to this study was defined as owners/managers of small service organisations situated in the Vaal Triangle region of South Africa. The sampling frame for the study comprised a list of small service organisations situated in the Vaal Triangle region, as obtained from the Vaal Triangle Info Business Directory. From this sampling frame, a non-probability judgement sample of 125 owners/managers of SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors was drawn. An unsolicited calling approach was followed, whereby the researcher personally visited each small service organisation individually to request permission to partake in the study. Thereafter, self-administered questionnaires were delivered for completion by the relevant owners/managers of each participating SSO, which were collected thereafter. In order to measure their perceptions of essential UBI services, participants were requested to indicate on a six-point Likert scale the level of unimportance or importance of 41 services. The owners/managers' perceptions of the importance of the six UBI service constructs over the business life-cycle phases were measured using multiple-choice questions, whereby the participants were asked to choose one of the five alternatives provided. The owners/managers' perceived value of UBI services was measured using dichotomous questions. In addition, certain demographical data were requested from the participants.

The findings of this study indicate that the owners/managers of SSOs perceive UBI services as being important. They indicated networking and professional services as

the most important UBI services, followed by management services, general business services, physical facilities and financial consulting services, of which university services were perceived as being the least important. The findings suggest that the UBI services were mostly required in the pre-start-up, start-up and growth phases of the SSO's business life-cycle phases. While UBI services were deemed important by both young and mature organisations, the owners/managers of young organisations perceived management services as more important than those of more mature organisations. In terms of the perceived value of UBI services, the findings reveal that although owners/managers perceived the UBI services to be important, they expressed minimal interest in utilising those services. Based on the participants' level of agreement concerning the perceived importance of UBI services, cluster analysis revealed two clusters, namely Cluster 1 and Cluster 2. The participants in Cluster 1, comprising more female participants and young organisations, perceived the UBI services as more important than those participants in Cluster 2.

Since the idea of UBIs is relatively new in South African, and given that they have yet to prove their value to industry, getting stakeholders to buy into the concept remains a daunting task. Insights gained from this study will help business incubators, universities, government and other stakeholders understand current entrepreneurs' perceptions towards the important UBI services required by SSOs. This, in turn, will help guide UBIs in the formation of their policy objectives, marketing strategies and marketing procedures.

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INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

Over the past two decades, the South African economy has witnessed a decrease in its capacity to recruit new entrants into the formal labour market (Davies, 2001:32; Horn, 2006:116; Ligthelm, 2006:30). Mahadea *et al*. (2011:66) stress that South Africa's economy is not producing enough employment opportunities to accommodate the influx of annual new entrants into the labour market, such as school leavers. Worryingly, on average only 5 to 7 percent of these school leavers find employment in the formal labour market (Horn, 2006:113). Fatoki and Chindoga (2011:162) indicate that 70 percent of South Africa's unemployed are the youth. Owing to the inability of South Africa's formal labour market to absorb new entrants, coupled with the rising youth unemployment, the South African government has prioritised the development of small, medium and micro enterprises (SMMEs) and entrepreneurship as a means to combat these challenges (Herrington *et al*., 2009:12; Olawale & Garwe, 2010:729).

Entrepreneurship, as a recognised intervention to the development and growth of an economy through the creation of jobs and poverty alleviation (Bezuidenhout & Nenungwi, 2012:11658; Herrington *et al*., 2009:11), is an important topic in the business literature (Co & Mitchell, 2006:349; Haasje, 2006:44; Kuratko & Hodgetts, 2007:5). Roodt (2005:24) accentuates that entrepreneurship has the potential to generate value for owners, stakeholders, consumers, employees and the economy as a whole. In order for South Africa to reach its full entrepreneurial potential and address its unemployment issues, it needs to seek ways in which entrepreneurs are encouraged to exploit the opportunities available and take advantage of the gaps that have been identified in the market (Davies, 2001:32; Ndlovu, 2011:4). Entrepreneurs who have an entrepreneurial mindset consisting of entrepreneurial characteristics and sufficient knowledge of business practices, have the capability of identifying opportunities in the market and as a result establishing successful SMMEs (Neneh & Van Zyl, 2012:8328).

Many countries around the world are increasingly recognising the significant contributions that SMMEs make to the employment and income generation aspects of the economy (Cant & Ligthelm, 2005:14). Within the South African economy, SMMEs, together with entrepreneurship, are promoted to enhance job creation, black economic empowerment, economic growth, community development, economic vitality and the diversification of the national economy (Botha & Esterhuyzen, 2012:12101; Mutambi *et al*., 2010:190; Ndabeni, 2008a:81; Smit & Watkins, 2012:6325). Small organisations (SOs) have proved to be especially vital in stimulating economic activity, job creation, poverty alleviation and the general upliftment of living standards internationally and in South Africa (Van Vuuren & Groenewald, 2007:269). According to Moore *et al*. (2008:7), a SO is an organisation that has localised business operations and that is financed by one individual, or only a few individuals.

Despite the contributions that SOs and SMMEs bring to the economy, they have multiple difficulties to overcome in their early growth period (Mutambi *et al*., 2010:190). According to Smit and Watkins (2012:6324), SOs and SMMEs face difficulties relating to inadequate capital, increased competition through globalisation and various legislations, and market expansions resulting from innovation and technology. Masama *et al*. (2012:11783) add that further difficulties relate to the SO or SMME owners lack of business and management skills, insufficient training and education and, most importantly, a lack of support. Owing to these difficulties, SOs and SMMEs are failing to operate their organisations successfully and consequently, fail to contribute to the development of the economy (Smit & Watkins, 2012:6324). Neneh and Van Zyl (2012:8328) confirm this by indicating that within the South African economy, 75 percent of SOs and SMMEs fail to become established organisations, representing the highest failure rate worldwide. Olawale and Garwe (2010:729) concur, highlighting that this is alarming, as the South African economy desperately need SOs and SMMEs that can sustain their organisation's operations and be successful, otherwise the economy might face stagnation.

Business incubators are organisations established to support SOs and SMMEs to overcome the challenges they face during their start-up and growth phases, when they are known to be most vulnerable to organisation failure. As such, business incubators

have been recognised in reducing the failure rate of SOs and SMMEs (Al-Maburaki & Busler, 2010:1; Buys & Mbewana, 2007:357; Raheem & Akhuemonkhan, 2014:73). Moreover, within developing and developed countries around the world, business incubators are recognised as important instruments for providing an effective means of promoting entrepreneurial activity, marketing activity and innovation at the SMMEs level (Adegbite, 2001:157; Mutambi *et al*., 2010:190; Ndabeni, 2008a:84). Business incubators', that have proven to be successful worldwide (Buys & Mbewana, 2007:356), main goals are to assist entrepreneurial start-ups to achieve high levels of growth, thus creating wealth and employment opportunities and, therefore, contributing to local and regional economic development (Erlewine & Gerl, 2004:6; Mutambi *et al*., 2010:196). Bøllingtoft and Ulhøi (2005:269) explain this, stating that business incubators provide assistance by offering start-up organisations valuable resources, services and assistance by establishing a cultivating environment for these organisations to operate in.

The National Business Incubation Association (NBIA) is widely recognised as a worldwide organisation progressing business incubation and entrepreneurship through providing information, education and networking resources to professionals, who alternatively assist start-up organisations. According to the NBIA, 1250 business incubators were in operation in the United States in 2012, with approximately 7000 business incubators in operation worldwide (NBIA, 2014). Wanklin (2002:23) highlights that remarkably, since 1979, less than 10 percent of SOs in the United States have been responsible for the generation of more than 75 percent of the employment opportunities. Astonishingly, in 2001, business incubators in North America contributed to establishing more than 35000 start-up organisations, which alternatively led to the creation of almost 82000 employment opportunities and generated annual earnings of more than seven billion dollars (O'Neal, 2005:11). In 2005, over 1000 business incubators assisted in establishing 27000 start-up organisations that generated over 100000 employment opportunities (Mutambi *et al*., 2010:202). In comparison to these countries, business incubators are relatively new in South Africa, with their stage of development still being in the infant phase (Buys & Mbewana, 2007:357; Mutambi *et al*., 2010:207). However, as noted by the Small Enterprise Development Agency (Seda), which is responsible for supporting business incubators, South Africa is advancing in the development of business incubators,

where to date in 2014, there are 43 business incubators in operation under the support of the Seda programme. To date, these 43 business incubators have assisted in creating 432 SMMEs and supporting more than 1587 SMMEs, which have led to the creation of 1824 employment opportunities (Seda, 2013/2014:6).

Business incubators offer incubation programmes, which include a variety of services and networking resources, to incubatees (Hackett & Dilts, 2005:57). The term incubatees is associated generally with the start-up organisations incubated through the business incubation programme (Grigorian *et al*., 2010:2; Lin *et al*., 2012:2092), which consists of three phases, namely pre-incubation, incubation and post-incubation (Mutambi *et al*., 2010:200). However, it should be noted that even though the primary goal of business incubators is to assist start-up organisations, they also provide services to external organisations that are not part of the business incubation programme (Bruneel *et al*., 2012:113; Lin *et al*., 2012:2093). Al-Mubaraki and Busler (2010:3) agree, stating that the economic development purposes of business incubators are also to provide services to existing SOs to assist in either stabilising the organisation, or expanding the organisation. Moreover, Erlewine and Gerl (2004:199) concur, stating that existing SOs might require specialised services from a business incubator, such as marketing or accounting services. As such, the incubatees of a business incubator not only refer to start-up organisations being incubated through the business incubation programme, but also to external existing organisations currently utilising the services of a business incubator.

The general services that business incubators provide to incubatees include rental space, shared office and communication services like access to a telephone and photocopier, business related services and facilities and equipment services such as conference rooms and computers (Kuratko & Hodgetts, 2007:266). Moore *et al*. (2008:491) concur, adding that business incubators offer incubatees an array of services relating to credibility, management assistance, links to accounting, legal and professional services, improved access to financial resources and training. Bøllingtoft and Ulhøi (2005:270) highlight that incubatees are also provided with intangible services that allow them to associate with peers in a social context. In the business incubation environment, incubatees are viewed as the most vital stakeholders in that they determine which services the business incubator should provide (Alsos *et al.*,

2011:610). Maital *et al*. (2008:2) stress that a successful business incubator should be able to coordinate the insights of a balanced fit between the business incubator service offering, incubatee needs, the business environment and the national and local culture as a one-size-fits-all service offering may not succeed across different industries, regions and countries. Colbert *et al*. (2010:72) agree, highlighting that incubatee needs can differ based on various factors, such as the phase of the organisation development or industry sector. Therefore, it is of utmost importance that business incubator managers determine the specific needs of incubatees in order to ensure that the business incubator service offering is aligned with the needs required.

Bøllingtoft and Ulhøi (2005:269) argue that business incubators may be established for various purposes, which has led to different forms of business incubators. Typically, some business incubators are established to accelerate regional economic development and to help exploit investment opportunities, while others are developed for the purpose of commercialising academic research. Todorovic and Suntornpithug (2008:390) explain that as a result of the key shareholders contributing to the establishment and sponsoring of business incubators, namely academic institutions, profit and government entities, various forms of business incubators have been developed, for example university business incubators (UBIs), for-profit business incubators, and non-profit business incubators. Business incubators can be grouped strategically on a basis of for-profit and non-profit objectives (Peters *et al.*, 2004:84; Von Zedtwitz & Grimaldi, 2006:460). Mutambi *et al.* (2010:199) explain that a for-profit incubator is established generally with the goal of providing rental space, capital, finance solutions and business mentoring at subsidised rates. In comparison, a non-profit incubator may be established by a public or non-public organisation that wishes to promote organisations in an area, a specific industry, or capitalise on entrepreneurial opportunities at a university, for example UBIs. Grimaldi and Grandi (2001:240) express that traditionally, universities were known as mere institutions that provide higher education learning. However, through UBIs, universities have emerged as engines of economic growth and development. Peters *et al.* (2004:84) elaborate that it may be useful to consider a UBI as a separate type of business incubator. In doing so, further insights may be gained regarding the business models used by universities.

Buys and Mbewana (2007:356) highlight that in many parts of the world, UBIs have

proven to be effective in enhancing the success of emerging organisations. Mutambi *et al.* (2010:194) accentuate that a UBI can provide support for potential entrepreneurs through ensuring that mentoring, financing, networks and business training is available. A UBI is concentrated on transforming research and development findings into new products and/or technologies by being principally concerned with development as an end in itself (Bøllingtoft & Ulhøi, 2005:271). UBIs are seen to provide general business incubator services, such as shared office services, business assistance, access to capital, business networks and rent breaks. In addition to these general business incubator services, UBIs also provide university-related services such as faculty consultants, student employees, enhancement of reputation, library services, equipment, mainframe computers, research and development activity, technology transfer programmes, employee education and training, and other social activities (Grimaldi & Grandi, 2001:241; Grimaldi & Grandi, 2005:112; Mian, 1996:327).

1.2 PROBLEM STATEMENT

Various research studies have been done on business incubators (Al-Mubaraki & Busler, 2010:1; Grigorian *et al*., 2010:1; Ndabeni, 2008b:259) as well as UBIs (Flavel & Kalendra, 2008:40; Lee & Osteryoung, 2004:418; Todorovic & Suntornpithug, 2008:385). More specifically, on the incubator best practice (Al-Mubaraki *et al*., 2013:114; Bergek & Norrman, 2008:20), incubator services (Abduh *et al*., 2007:74; Bruneel *et al*., 2012:110; Flavel & Kalendra, 2008:40), and the critical success factors of incubators (Buys & Mbewana, 2007:356; Mian, 1997:251; Verma, 2004:4). Whilst numerous studies have been done on the services that business incubators offer incubatees in the international context (Bruneel *et al*., 2012:110; Flavel & Kalendra, 2008:20; Grigorian *et al*., 2010:1; Scott, 2000:87), limited research has been conducted on the services that entrepreneurs require from a UBI in the South African context. Moreover, while it is noted that incubators provide incubatees with marketing assistance (Abduh *et al*., 2007:87; Al-Mubaraki & Busler, 2011:105; Meru & Struwig, 2011:113), scarce attention has been given to marketing practices of incubators itself. Bøllingtoft and Ulhøi (2005:280) postulate that while previous studies have examined the most utilised incubator services, these researchers advise that it is critical to differentiate between the services that incubatees perceive as the most important and

those that are less important. Therefore, it is imperative to determine which services entrepreneurs in the South African context specifically require, and thus, the services South African UBIs should be providing.

Buys and Mbewana (2007:357) and Verma (2004:3) warn that not all incubators are successful. Mutambi *et al*. (2010:198) opine that the slow success levels or failure of incubators may be attributed to a variety of reasons, including differences in regional characteristics, the policy and the regulatory environment, economic factors, different stakeholders involved, culture and attributes of incubatees, the vision and mission of the incubator, and the mode of management. Colbert *et al*. (2010:21) emphasise that the incubator staff, including management, are the most essential asset contributing to the success of the incubator. As such, in order to ensure the success of the incubator it is essential that the incubator staff have the skills to market the incubator to potential incubatees, sponsors and stakeholders and effectively identify incubatee needs.

Todorovic and Suntornpithug (2008:404) and Colbert *et al*. (2010:72) highlight that it is essential for UBIs to determine the industry specific needs of incubatees as some services might be industry specific. The service industry is one of the fastest growing industries worldwide and within developed countries around the world and the service industry constitutes the majority of the total workforce, with figures approximating around 80 percent (Petzer *et al*., 2008:2). Since the 1990s, the service industry has been the main source of growth for the South African economy (Hodge, 2001), accounting for approximately 65 percent of the South African economy (Theunissen, 2007:53).

Worryingly, within the South African economy, the population is beginning to consider crime as an alternative to unemployment. This is especially an issue amongst the unemployed and undereducated youths of South Africa (Davies, 2001:32). Generally, SMMEs create employment opportunities. However, given the high degree of business mortality within this sector, these organisations are struggling to create long-term sustainable employment opportunities (Cant & Ligthelm, 2005:14). Ferreira *et al*. (2010:94) stress that, given the high failure rate of SMMEs in South Africa, support services that render business assistance to SMMEs may not always be successful, as attention is not focused on the areas that may enhance success rates. Consequently, the question arises as to whether the owners of SMMEs are receiving

the correct type of assistance at the right time in the business life cycle.

The problem addressed in this study is to determine which UBI services entrepreneurs require within the South African context. This information will assist in guiding UBI policy objectives, marketing strategies and marketing procedures. In addition, by creating an awareness of the services needed by entrepreneurs, UBIs will be able to coordinate the services offered to those required and as such improve their marketing efforts for promoting these services. As such, the results obtained from this study will guide UBIs in creating policy objectives, marketing strategies and marketing procedures for the effective and efficient marketing of their incubator.

1.3 OBJECTIVES OF THE STUDY

The following objectives were formulated for the study:

1.3.1 Primary objective

The primary objective of this study was to determine the essential incubator services that small service organisations (SSOs) require from a UBI in order to guide the formation of policy objectives, marketing strategies and marketing procedures.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Review the literature on the fundamental business management functions
- Outline the importance of entrepreneurship
- Review the literature on the characteristics of SOs
- Conduct a review on business incubators and UBIs
- Conduct a review on UBI services
- Conduct a review on marketing

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Determine the perceived importance ranking of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services and university services) amongst SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.
- Determine whether there is a difference regarding the owners/managers' perceived importance of UBI services required between SSOs that have been in operation for five years or less and those that have been in operation for more than six years.
- Determine whether there is a difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceptions towards the importance of UBI services required.
- Determine at what phase of the business life cycle, namely pre-start-up, start-up, growth or maturity, the SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors perceive the UBI services to be important.
- Determine the SSO owners/managers' perceived value of UBI services amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.
- Formulate participant groups based on agreement of the perceived importance of services required from a UBI amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.

1.4 HYPOTHESES

A hypothesis is a supposition made by a researcher concerning a specific characteristic of the population undergoing examination (McDaniel & Gates, 2013:472). The following four hypotheses were formulated for the study:

Ho1: SSO owners/managers in the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) do not perceive physical facilities, general business services, management services, networking and professional services, financial consulting services and university services as important UBI services.

Ha1: SSO owners/managers in the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) perceive physical facilities, general business services, management services, networking and professional services, financial consulting services and university services as important UBI services.

Ho2: There is no significant difference between young SSOs and mature SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceived importance of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ha2: There is a significant difference between young SSOs and mature SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceived importance of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ho3: There is no significant difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services (physical facilities, general business services, management

services, networking and professional services, financial consulting services, and university services).

Ha3: There is a significant difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ho4: There is no significant difference between the clusters (Cluster 1 and Cluster 2) and the perceived importance of the UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ha4: There is a significant difference between the clusters (Cluster 1 and Cluster 2) and the perceived importance of the UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

1.5 RESEARCH DESIGN AND METHODOLOGY

The study comprised a literature review and an empirical study. Quantitative research, using the survey method, was applied for the empirical portion of the study. A descriptive research design with a single cross-sectional sample was followed.

1.5.1 Literature review

In order to support the empirical study of this research project, a review of South African and international literature was conducted. Secondary data sources included relevant textbooks, the Internet, journal articles, business articles, academic journals, newspaper articles and online academic databases.

1.5.2 Empirical study

The empirical portion of this study comprises the following methodology dimensions:

1.5.2.1 Target population

The target population relevant to this study comprised the owners/managers of SSOs in South Africa. Specifically, the target population was defined as follows:

- Element: Owners/managers of SSOs
- Sampling units: SSOs
- Extent: Vaal Triangle, South Africa
- Time: 2014

1.5.2.2 Sampling frame

The sampling frame for this study is owners/managers of SSOs in the Vaal Triangle region. The sampling frame comprised a list of SSOs situated in the Vaal Triangle, as obtained from the Vaal Triangle Info Business Directory (Vaal Triangle Info, 2005). Whilst there are various new organisations being established in the Vaal Triangle, together with existing organisations relocating or ending their operations, the Vaal Triangle Info Business Directory is deemed as one of the most comprehensive lists in South Africa. The website has the highest number of visits and hits in comparison to any other website in the Vaal Triangle region. As such, a decision was undertaken to use the Vaal Triangle Info Business Directory (Vaal Triangle Info, 2005) for the sampling frame of this study. The Vaal Triangle, formed by Vereeniging, Vanderbijlpark and Sasolburg, is situated within the Gauteng province and is home to nearly a million people (Show Me Vaal, 2014). Furthermore, this region consists of a mix of heavy industry coupled with touristic pleasures (South Africa Online, 1996-2012). Within the latter half of the twentieth century, the Vaal Triangle region became known as the industrial hub of South Africa (Vaal Triangle Info, 2005). In order to make the study more manageable and for reducing time and cost, it was decided to only include the SSOs situated within the Vaal Triangle region.

1.5.2.3 Sample method

The sampling method used for this study was a non-probability judgement sampling of owners/managers of SSOs in the service industry sectors, namely auto, estate and property management, health care and beauty, hospitality and accommodation, and

professional service industry sectors in the Vaal Triangle Region. The researcher personally visited each SSO, through following an unsolicited calling approach, individually, to request permission for the self-administered questionnaire to be completed.

1.5.2.4 Sample size

A sample size of 125 SSOs was selected for this study. This sample size is in the range of other studies of a similar nature, such as Abduh *et al.* (2007:79) (sample size of 129), Meru and Struwig (2011:112) (sample size of 124), Peña (2004:223) (sample size of 114) and Scott (2000:99) (sample size of 118), and therefore, was deemed sufficiently large. An attempt was made to split the sample size of 125 SSOs representatively across the different service industry sectors, namely auto, estate and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors (25 per industry).

1.5.2.5 Measuring instrument and data collection method

In order to measure the incubator services that SSO owners/managers require from a UBI, the relevant literature on the various business management functions, entrepreneurship and SOs was analysed, which provided details on the UBI services. The participants were requested to complete a structured questionnaire consisting of four sections. The first section (Section A) gathered the demographic information pertaining to the SSO owner/manager and the SSO. The second section (Section B) included the items pertaining to the UBI services. This 41-item scale measuring the organisation owners/managers' perceptions of important UBI services comprised six dimensions, namely physical facilities (8 items), general business services (7 items), management services (5 items), networking and professional services (7 items), financial consulting services (9 items), and university services (5 items). The organisation owners/managers' perceptions were measured on a six-point Likert scale (1 = very unimportant to 6 = very important) based on the participants' perceived importance or unimportance of the UBI services listed. An additional open-ended question was included in this section of the questionnaire, asking participants if there were any other services required that were not listed as part of the UBI services. The third section (Section C) included the UBI services that are possibly important to the

SSO owners/managers at various stages of the business life cycle. The SSO owners/managers were requested to indicate at which phase of the business life cycle they considered the listed UBI service constructs to be important, whereby five multiple-choice questions were included (1 = pre-start-up; 2 = start-up; 3 = growth; 4 = maturity; 5 = not applicable). The fourth section (Section D) of the questionnaire asked the participants to indicate their opinions on a dichotomous scale (1 = yes and 2 = no), on a number of statements relating to the value of a UBI.

In addition, the questionnaire was accompanied by a cover letter describing the nature and purpose of the study, instructions on how to complete the questionnaire, as well as requesting participation from the participants. In order to ascertain its reliability, the questionnaire was piloted on a convenience sample of 30 SSOs. These SSOs did not form a part of the sampling frame of the main study. The results of the pilot test were taken into consideration prior to finalising the questionnaire for the main study.

A self-administered questionnaire using the drop-off survey method was used to collect the required data from this study. The researcher personally visited each SSO individually to request permission for the questionnaire to be completed. After permission has been solicited in person, the questionnaires used in this study were hand-delivered to the owners/managers of SSOs to be completed at their convenience and collected at an agreed upon time two weeks later. Subsequently, the responses to the questionnaires were prepared for statistical analysis by means of coding and tabulating.

1.5.3 Statistical analysis

The captured data were analysed using Statistical Package for Social Sciences (SPSS), Version 22. The following statistical methods were applied on the empirical data sets:

- Reliability and validity analysis
- Descriptive analysis
- Correlation analysis
- Significance tests
- Cluster analysis

1.6 ETHICAL CONSIDERATIONS

This study complied with the ethical standards of academic research. The identities and interests of participants were protected and the information provided by the participants was dealt with in a confidential manner. The participation was voluntary in that no individual person or organisation was forced to participate against his or her will. Furthermore, the required permission was obtained from the owners/managers of the SSOs.

The questionnaire, together with the outlined research methodology followed in this study, were subject to the revision of the North-West University's ethical committee to ensure that any persons who could be classified as being vulnerable were excluded from the target population and sampling frame utilised for the purpose of drawing the sample of participants for this study. Moreover, the committee examined the measurement instrument to ascertain that the information requested from the participants was not of a sensitive nature. The questionnaire surpassed the committee's standards, whereby the following ethical clearance number was issued: **Econit-Econ-2014-020.**

1.7 CONTRIBUTIONS OF THE STUDY

In South Africa, UBIs are still in the development phase, with very limited literature available. One of the main purposes of this study is to provide information and theory to the literature of South Africa, and enhance incubator literature internationally. Since the idea of UBIs is relatively new in South African, and given that they have yet to prove their value to industry, getting stakeholders to buy into the concept remains a daunting task. To this extent, the empirical findings of this study contribute to identifying the service requirements of SSOs. This, in turn, will aid UBIs in establishing the key services to provide and market to entrepreneurs. In addition, the empirical findings of this study will help guide UBIs in the formation of their policy objectives and procedures. Therefore, the results of this study would enable UBIs to provide a better structure for their marketing objectives and strategies.

1.8 CLARIFICATION OF TERMINOLOGY

Small, medium and micro enterprises (SMMEs) comprise organisations that are usually operated by one or only a few people and that fulfil the criteria of the number of employees, overall turnover and total asset value in the respective size classes of small, medium and micro enterprises.

Small organisations (SOs) are defined as organisations that have less than 50 employees and that are operated and managed by one or only a few people, and where, in most situations, the owner and manager is the same person.

Small service organisations (SSOs) are defined according to the definition of small organisations, except they only include organisations currently operating in the service industry sector.

Business incubators assist start-up organisations in shortening the time and reducing the costs of establishing and growing the start-up organisation through providing them with an array of general services in a protected environment, thereby enhancing their chances of success and survival.

University business incubators (UBIs) are defined in the same way as business incubators, however, in addition to the general business incubator services provided, university business incubators also provide university related services and are more focused on transforming research and development findings into new products and/or technologies.

1.9 CHAPTER CLASSIFICATION

Chapter 2 provides a literature review on business management for entrepreneurs. This chapter provides an overview of the business management literature, which includes the business environments, general management principles and functional management. As an important element of business management, entrepreneurship and entrepreneurs are discussed briefly, together with the entrepreneurial process, an entrepreneurial business life cycle and the business plan. As small business organisations are linked to entrepreneurship, an overview of the literature pertaining to the small business organisation is provided concerning its definition, importance,

general management principles, challenges and support systems.

Chapter 3 provides a literature overview on UBIs, which includes defining business incubators, noting the importance of business incubators, stating the types of incubators and providing further insights to the services offered. As identified, it is important that UBIs follow regular business operations to ensure success. As such, this chapter also highlights the essential marketing practices that UBIs should incorporate into their operations.

Chapter 4 presents the research design and methodology employed for the empirical portion of this study. This chapter defines the population, sample frame, data collection methods and discusses the sampling method. The response rate to the questionnaire is examined and any problems experienced are discussed. The data analysis and statistical procedures used in this study are also discussed.

Chapter 5 reports on the results of the empirical study. This chapter is used to analyse, interpret and evaluate the research findings. Moreover, the results of the statistical analysis procedures that are applied to conduct the analysis on the sets of data are reported on.

Chapter 6 reviews the entire study and provides conclusions to the study. Recommendations emanating from the study are made in accordance with the empirical objectives set out for the study. The limitations of this study and guidelines for further research are made upon completion of the conclusion on the study.

1.10 GENERAL

- Annexures are placed at the end of the thesis
- Tables and figures are placed on the applicable pages in the thesis
- Researchers own work is indicated where no reference sources are provided for figures and tables
- Internet sources do not have reference page numbers in the text
- The Harvard Style from the 2012 version of NWU referencing guide is utilised for the referencing base.

1.11 CONCLUSION

South Africa is a developing country currently experiencing very high levels of unemployment and poverty. In order to revitalise the South African economy, opportunities need to be created for employment. SMMEs are considered vital elements in stimulating local economies' growth levels, community development and vitality, through creating opportunities for employment and poverty alleviation. However, the SMME sector within the South African economy is being subjected to elevated degrees of business mortality. As a result, the SMME sector is battling to develop sustainable opportunities for long-term employment, which is necessary to accelerate the local economies' growth levels, community development and vitality.

SMMEs encounter many difficulties in their start-up and growth phases due to a lack of business and financing support. Business incubators are organisations that are aimed at cultivating the development of SMMEs and SOs. In South Africa, business incubators are still in the infancy phase of development.

The following chapter, Chapter 2, outlines the background literature to business management for entrepreneurs. This chapter highlights the business management principles and management functions in the context for entrepreneurs, where entrepreneurship and entrepreneurs will be defined. In addition, further insights will be provided to the literature on SOs.

CHAPTER 2
BUSINESS MANAGEMENT FOR ENTREPRENEURS

2.1 INTRODUCTION

The business world is a complex system of individuals and business organisations that involve the transformation of resources into products and services to meet consumers' needs in exchange for profit (Venter, 2013:5). Businesses are established to provide products and services that will ultimately lead to the satisfaction of consumer needs and wants (Bates *et al*., 2005:2). In order for businesses to provide these products and services, resources, referred to as factors of production, are required, which relate to natural resources, human resources, capital and entrepreneurship. Of these four factors, entrepreneurship, referred to as the collective capacity of entrepreneurs (Venter, 2013:5), is essential in merging the other three factors of production (Van Rensburg, 2008:4). Therefore, while entrepreneurial businesses are important for the development, growth and sustainability of an economy (Nieuwenhuizen, 2004:3), effective management is essential to ensure business growth and success (Botha & Musengi, 2012:1; Strydom, 2011:53). Dyck and Neubert (2009:7) explain the management of businesses is used for achieving business goals and objectives through the tasks of planning, organising, leading and controlling. Business managers, however, require the necessary skills and knowledge to perform these tasks, functions and other related activities (Hellriegel *et al*., 2008:16).

This chapter provides a review of the literature concerning business management for entrepreneurs of SOs, and is set out in accordance with the theoretical objectives formulated in Chapter 1. Section 2.2, discusses the concept of business management, which includes a definition of business management, its purpose and task, and a business as an organisation. The business environment discussed in Section 2.3 includes a description of the interaction between a business and its environment, as well as the internal and external business environment in which a business operates. General management principles discussed in Section 2.4 include a definition of management, its different levels, tasks associated with it, and essential management skills. Section 2.5 examines the management of the functional areas of the

organisation, which include marketing management, public relations, human resources, production and operations, financial-, logistics-, purchasing-, and administrative management, as well as various legal issues in managing a business. Entrepreneurship is discussed in Section 2.6, through the definition of entrepreneurship, its importance and the types of entrepreneurial organisations, followed by a definition of entrepreneurs, and creativity and innovation relating to the entrepreneur. Section 2.7 explains the entrepreneurial process, which includes identifying and evaluating the opportunity, developing the business plan, determining the resources required and lastly, starting and managing the enterprise. Section 2.8 describes the entrepreneurial business life cycle, whereas Section 2.9 provides further insights to the development of the business plan, which was introduced briefly under the entrepreneurial process. A discussion pertaining to the management of SOs follows in Section 2.10 and includes a definition, general management principles, and importance of SOs, as well as challenges encountered by SOs and support systems for SOs in South Africa. Section 2.11 concludes this chapter.

2.2 OVERVIEW OF BUSINESS MANAGEMENT

The importance of business management can be recognised through business organisations' role and contributions to the economy (Van Rensburg, 2008:16). Botha and Musengi (2012:1) indicate that this is especially true in South Africa, where the changing environment has brought about tremendous opportunities for the exploitation of business and entrepreneurship. However, entrepreneurs and business owners should equip themselves with the necessary skills before exploiting these opportunities. This section addresses the concept of business management and its various components.

2.2.1 Business management defined

Business management is defined as a field of study that centres its attention on institutions that aim to satisfy consumers' needs and wants. In this sense, business management focuses on the development, management, tasks, principles and other related activities that concern a business, referred to as an institution (Strydom, 2011:4). Bates *et al*. (2005:2) state that business management specifically focuses on the activities and functioning of management associated with the various types of

business organisations. More specifically, Botha (2012:2) highlights that business management describes the nature of a business organisation and the manner in which it should be established and managed.

For the purpose of this study, business management will be considered as a field of study that concerns the entire scope of a business organisation including its nature, establishment and management. The following section highlights the purpose and task of business management.

2.2.2 Purpose and task of business management

The purpose of business management is to ensure that businesses adhere to the economic principle to which every economic system is subject (Cronje *et al*., 2000:23). Van Rensburg (2008:3), along with Venter (2013:31), explain that the economic principle is a means to produce the maximum amount of products or output at the minimum possible cost or input. As such, businesses should aim to satisfy consumer's needs and wants in the best possible manner by using the limited resources effectively (Cronje *et al*., 2000:23). Strydom (2011:6) concurs and indicate that the economic principle implies that businesses should at least cover the basic costs of producing and delivering the products or services to the consumers and generate a profit.

From the purpose of business management, the task of business management emerges, which is to determine how a business can achieve the highest possible output, with the minimal possible input (Venter, 2013:31). More specifically, business management entails analysing the factors, methods and principles that enable a business to operate in the most efficient and productive manner to ensure the maximising of profits (Cronje *et al*., 2000:23). Van Rensburg (2008:4) states that profit is the main reason for the existence of a business. Alternatively, the living standards of the business owners and employees are improved when the profits of a business are increased. The subsequent section explains a business as an organisation.

2.2.3 A business as an organisation

According to Cronje *et al*. (2000:37), a business can also be considered as an organisation due to the reasoning that people grouping themselves together to obtain a

multiple number of objectives that would otherwise be too complex to be attained by individually established organisations. In this sense, an individual with several needs would be able to satisfy all these needs through the formation of groups or organisations as opposed to satisfying only a few of them individually (Cronje *et al*., 2000:37). According to Hellriegel *et al*. (2008:6), the individuals that make up an organisation work towards the general accomplishment of an objective that can be noted as the purpose of the organisation, which is to produce products and services that satisfy consumers' needs and wants.

The most important aspect of an organisation is management because management creates a structure for the individuals to obtain the objective stated that, in turn, would justify the existence of the organisation. A business also is considered an organisation through the general definition of both institutions, which is to satisfy consumers' needs where the individuals who make up the organisation or business do so in order to satisfy their own needs and those from the perspective of the community. In light of considering a business as an organisation, a better understanding of its functioning can be gained (Cronje *et al*., 2000:37). Therefore, for the purposes of this study, a business is considered as an organisation and these terms are used interchangeably. The subsequent section provides an overview of the business environment.

2.3 THE BUSINESS ENVIRONMENT

Broader social, political, economic and technological environments influence the environment in which a business operates (Nieuwenhuizen, 2013:8). In light of these business environment influences, this section addresses the interaction between a business and its environment, with reference to the internal and external environment in which a business operates.

2.3.1 Interaction between a business and its environment

While society depends on business organisations for most of the products and services it needs, as well as employment opportunities, conversely, businesses obtain resources from the society and environment in which they operate. Hence, businesses and society are mutually dependent on each other (Strydom, 2013:101). Botha (2012:6) agrees and states that the environment surrounding the business is a crucial element as

the business cannot function on its own. The business employs people in order to produce and deliver the products or services that satisfy consumer's needs, whereby the employees are remunerated by either a salary or wages. On the other hand, the employees themselves also have needs and will utilise their remuneration on the products and services that satisfy their needs (Botha, 2012:6). Thus, Bates *et al*. (2005:11) opine that through these interactions, businesses are reliant on the community to purchase their products and services so that they can generate profits to pay their employees and purchase the inputs required for production. In return, the community is reliant on businesses for employment opportunities, whereby the remuneration received will satisfy the employee's needs. Figure 2.1 illustrates this interaction between a business and its environment.

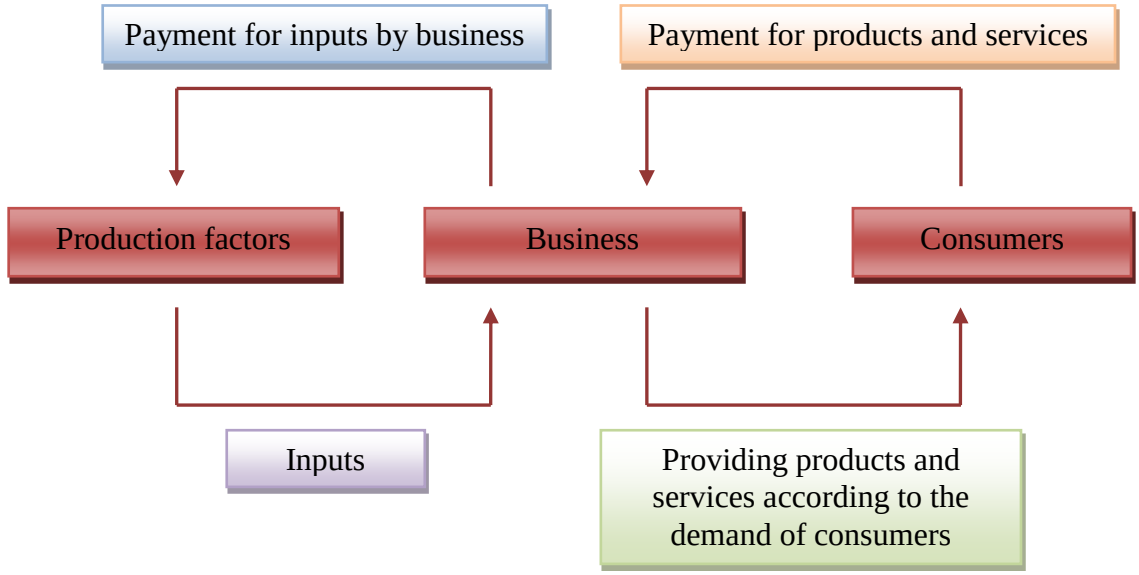


Figure 2.1 Interaction between a business and its environment – the economic cycle (Van Rensburg, 2008:6)

Figure 2.1 illustrates the interaction between the business and the environment by means of illustrating that businesses need both production factors to produce the inputs required and consumers to purchase their outputs (Van Rensburg, 2008:6). Botha (2012:6) and Greene *et al*. (2015:26) suggest that organisations are only capable of producing the required products and services if they have the resources to do so, as without the resources, organisations will fail to exist. These resources are referred to as the factors of production and can be noted as natural resources, capital, human resources and entrepreneurship.

Natural resources are obtained directly from nature, which include resources found on earth, in the sea or air. Of these, some can be used either in raw form, or in some instances need to be refined before they can be used (Botha, 2012:6). Strydom (2011:9) states that capital refers to the money or assets required in the organisation to produce products and services. Human resources, on the other hand, include the physical or mental human activity needed to produce the products or services (Van Rensburg, 2008:4). Entrepreneurship, as the last factor of production, can be defined as the process of combining the other factors of production (Bates *et al*., 2005:101) through an entrepreneur who originally identified the opportunity and undertook the risk and uncertainty of starting the organisation (Strydom, 2011:10).

Jones (2007:7) states that the factors of production are synchronised in the organisation as the organisation needs land to operate on, as a source of natural resources, and employees to assist in the production of products and services, thus indicating the need for human resources. Furthermore, capital would be required by the organisation, as the organisation needs to purchase the raw materials, inputs, machinery and equipment as well as pay for the land, human resources and other expenses (Venter, 2013:16). Lastly, the organisation would require an entrepreneur with the necessary skills, knowledge and expertise needed to combine the other factors of production (Jones, 2007:7).

An organisation cannot function in isolation as the factors surrounding the organisation impact on the organisations operations (Bates *et al*., 2005:12). Hellriegel *et al*. (2008:81) concur, indicating that the organisational environment refers to all the forces beyond the organisation's borders that could possibly affect the organisation's goals, objectives and strategies. Botha (2012:11) encapsulates this by stating that organisations are in constant dealings with their surrounding environment. While businesses are dependent on the people within the community to purchase their products and services to generate profits, alternatively, the people in the community are also dependent on the organisations to provide employment opportunities.

The organisations environment is divided into two contexts, namely the internal and external environment (Bates *et al*., 2005:13; Botha, 2012:11; Hellriegel *et al*., 2008:81; Kiley, 2011:31). These two contexts are described in the following sections.

2.3.2 Internal environment

The internal environment of an organisation often is referred to as the micro or decision-making environment as it relates to all the factors that occur within an organisation. The existence and growth of the organisation stem from the decisions undertaken by management within this environment (Botha, 2012:12). According to Kiley (2011:32), the most distinguishing element of the internal environment, in comparison to the market and external environment, is that the organisation has direct control over the operations that occur, as managers are responsible for the decisions made, which ultimately can be changed. As such, managers aim to make decisions that are in the organisation's best interest.

Bates *et al*. (2005:96) indicate that the internal environment is made up of four sets of variables, namely the factors of production, the vision, mission and objectives of the organisation, the functions of management, and the management tasks. The factors of production, known as natural resources, human resources, capital and entrepreneurship were discussed in Section 2.3.1 of this chapter. According to Strydom (2013:110), the vision, mission and objectives of the organisation are the reason for its existence. Booysen and Visser (2012:52) concur stating that the organisation's vision is the dream aspiration as to what they would like to become, whereas the mission is used to accomplish the stated vision. Moreover, once the vision and mission statements of the organisation have been established, the goals and objectives should be determined (Strydom, 2013:111). The goals of the organisation are stated over a long-term period indicating that they are broad targets that the organisation aims to accomplish. In comparison, the organisation's objectives, which are developed in accordance with the goals, indicate specific targets that should be attained in the short-term (Booysen & Visser, 2012:52). Kiley (2011:33) highlights that the management tasks, namely planning, organising, leading and controlling, are critical as these tasks ensure that the organisation's objectives are being met. In light of this, a discussion of the management tasks is provided in Section 2.4.3 and the management functions in Section 2.5 of this chapter. Owing to the external business environment influencing its internal environment, the following section reviews the literature on the external environment.

2.3.3 External environment

The external environment consists of factors outside the organisation, or within the economy. This environment consists of two parts, namely the market or task environment and the macro or general environment (Musengi, 2012:102). Kiley (2011:31) states that an organisation will utilise the market environment to acquire the necessary resources or sell its products or services. As such, the organisation's suppliers, intermediaries, consumers and competitors form the major variables of the market environment. Additionally, only some of the variables within the market environment can be controlled by the organisation. For example, while the organisation can control who their suppliers are, the consumers purchasing the organisations products and services cannot be controlled. In such an instance, the organisation can only exert a certain level of influence over the consumers by, for example, using advertising.

The macro environment is the external environment in which the organisation operates and has no control or influence over. However, the variables and forces of the external environment have a direct impact on the operations of the organisation (Strydom, 2013:116). The variables of this environment include general economic conditions, the political and legal environment, social and demographic trends and developments, technological advancements and global pressures (Hellriegel *et al*., 2008:81). Bates *et al*. (2005:108) emphasise that the macro environment creates uncertainty for the organisation through the constant changes occurring. Therefore, it is important for business managers to create strategies in overcoming these uncertainties. Booysen and Visser (2012:63) highlight that the effectiveness of the organisation will depend on the opportunities business managers utilise to deal with uncertainty.

Owing to management being an indispensable component of the successful functioning of an organisation (Rudansky-Kloppers, 2013:171) a more comprehensive overview of the principles of management are essential and outlined in the following section.

2.4 GENERAL MANAGEMENT PRINCIPLES

Organisations require efficient management to ensure the operations are in order and as such, management is a very important aspect of organisations (Oosthuizen, 2011:54). Bates *et al*. (2005:25) concur, indicating that the success of the organisation strongly depends on the process of management, as management directs the organisation towards the achievement of its objectives and creates a balance between the organisation's owners, resources, employees and the external environment. Botha and Musengi (2012:1) state that management involves tasks and skills required for the different functions in the organisation. This section describes the concept of management and provides an overview on the different levels of management, management tasks and management skills.

2.4.1 Management defined

The development of business management has seen various definitions of management arise. Oosthuizen (2011:56) defines management in terms of all activities relating to the organisation where management has to ensure that the employees conducting work-related activities do so in an efficient and effective manner, whereby management overlooks the process and co-ordinates these activities. Rudansky-Kloppers (2013:171) provides a simple definition of management as the process that managers follow to accomplish organisational goals and objectives. In addition to this, Botha's (2012:2) definition of management focuses specifically on the optimisation of resources, stating that management should ensure the optimal utilisation of the organisation's resources in order to achieve the pre-determined objectives. In order to reach the organisation's objectives, management should focus on planning, organising, leading and controlling the resources. According to Bates *et al*. (2005:2), this denotes that management is responsible for satisfying consumers' needs and alternatively generating a profit.

According to Oosthuizen (2011:56), a manager is expected to carry out management tasks in order to fulfil specific responsibilities. Pillai (2011:3) concurs, indicating that a manager is employed in a managerial position, given some sort of authority and provided with control over resources to achieve the organisational goals. Oosthuizen (2011:56) denotes that an effective manager possesses specific attributes such as the

ability to keep the work environment positive, develop an interactive environment for enhancing employees' performance, pose as a leader or follower, continuously motivate employees and keep communication channels open, as well as recognise and reward good performance by employees.

2.4.2 Different levels of management

Management, in an organisational context, can be divided into three managerial levels, namely, top, middle and lower management (Oosthuizen, 2011:59). Top management comprises the relatively small group of executives who is responsible for the business as a whole (Rudansky-Kloppers, 2013:174). Kuratko *et al*. (2005:701) postulate that the focus area of top management is setting the organisation's direction and reaching its objectives, with specific focus on the long-term aspect of the organisation. Kroon (2008:58) elaborates that top management is responsible for the strategic management of the organisation, together with setting the organisation's vision, mission, strategy, objectives and goals, the draft of a strategic plan and an organisational structure, handling important decisions and lastly, the control functions within the organisation.

According to Hales (2007:32), middle management is defined broadly as a section of the entire organisation that manages the flow of information and activities between the top, strategic management and lower or operational management. Bates *et al*. (2005:371) state that middle management consists of separate managers from each of the functional areas within the organisation. These managers concentrate on the medium-term aspects of the organisation and execute the decisions taken by top management. Oosthuizen (2011:59) agrees and explains that top management provides middle management with the comprehensive, overall strategies developed for the organisation, which middle management has to convert into detailed goals and action plans. These detailed goals and action plans are then passed down to lower management to be implemented.

Lower management, also referred to as supervisory or line management (Rudansky-Kloppers, 2013:175), is involved primarily with the operational, short-term operations of the organisation (Kroon, 2008:59). Lower management is positioned at the front-line of the organisation and as such is actively involved with absorbing information

from the external environment (Kuratko *et al*., 2005:702). Hales (2007:34) provides some main functions that are undertaken by lower management, such as routine planning and allocation of work activities, describing operations processes, monitoring the quality of products and services, maintaining equipment, and dealing with day-to-day activities or problems. An overview of the different tasks of management is provided in the next section.

2.4.3 Management tasks

Management has to ensure that the organisation's goals and objectives are reached through effectively working with other employees in the organisation (Botha, 2012:18). In order to do so, management follows a process consisting of four management tasks, namely planning, organising, leading and controlling (Bates *et al*., 2005:23; Botha, 2012:19; Dyck & Neubert, 2009:7; Hellriegel *et al*., 2008:10; King *et al*., 2005:115; Kroon, 2008:51; Oosthuizen, 2011:60). A brief description of these fundamental management tasks follows:

- **Planning:** The planning task forms the first step in the management process, whereby managers decide what needs to be achieved (Botha, 2012:19). Planning identifies the organisation's goals and objectives and the allocation of resources required to achieve these goals and objectives effectively (Dyck & Neubert, 2009:8). Hellriegel *et al*. (2008:10) state that managers plan for three reasons, which include the development of the organisation's future direction, establishing a base of how the organisation's resources should be utilised to attain the goals, and deciding which tasks are needed to reach the organisation's goals. According to Oosthuizen (2011:60), planning should be done in advance and shows an indication of what to do, how to do it, when to do it, and who is responsible for doing it.
- **Organising:** Organising forms the second step in the management process, which is conducted after the goals and objectives have been determined (Bates *et al*., 2005:24). In order to ensure that the necessary plans are carried out, organising is utilised to allocate duties, authority and responsibility. Management decides on the work that should be done, who the best people are to do the work, how much of the work is allocated to each person and who they should report to (King *et al*.,

2005:117). Moreover, managers delegate work responsibilities to employees within the organisation and supervise resources, such as people, materials, equipment, money and time, to ensure that they are effectively utilised to attain the organisation's goals and objectives (Oosthuizen, 2011:61).

- **Leading:** Leading entails directing the human resources of the organisation and motivating them to perform optimally (Rudansky-Kloppers, 2013:172). Botha (2012:19) concurs stating that leaders of the organisation should positively influence, or motivate employees to achieve the organisational goals and objectives. Rudansky-Kloppers (2013:172) further postulates that leadership in the organisation has a decisive effect on the culture prevailing in a business. Bates *et al*. (2005:24) highlight that communication between management and the employees is an important aspect of the leading task. Managers, enacting as leaders, should build successful relationships with the employees in order to achieve the organisation's goals and objectives as a team. Hellriegel *et al*. (2008:10) emphasise that leadership should be incorporated into the process of planning and organising.
- **Controlling:** As the final step in the management process, controlling creates linkages between the management tasks of planning, organising and leading (Oosthuizen, 2011:62). Controlling is the task of making sure that the organisational objectives are achieved in the manner that they were intended to in the planning phase (Botha, 2012:19). According to King *et al*. (2005:118), controlling is conducted by a comparison between the actual and planned results. The organisational goals will be achieved successfully if there are minor or no deviations found between the actual and planned results. However, management will have to execute new plans if there are major differences between the actual and planned results.

Managers require a set of management skills in order to be effective in fulfilling their respective tasks of planning, organising, leading and controlling (Oosthuizen, 2011:65; Ping *et al*., 2012:14). In light of this, a discussion pertaining to the management skills required in executing the management process, namely conceptual, interpersonal and technical skills (Rudansky-Kloppers, 2013:177) are provided in the following section.

2.4.4 Management skills

Cunningham and De Kock (2012:114) emphasise that a skill, which is an individual's physical capacity to do something, may either be attained through experience or training. For example, a skill might be present when completing a task. Peterson and Van Fleet (2004:1298) state that a skill may consist of three parts, the first is the establishment of an area requiring specific knowledge, then the generation of techniques to assess the area identified and lastly, the ability to perform specific behaviours by utilising the specific knowledge to complete the task at hand.

In the domain of management, it is essential that managers have sound management skills to create strong teams that are capable of overcoming the forces of competition currently affecting the majority of markets (Mujtaba *et al*., 2012:130; Tajaddini *et al*., 2010:1). Ping *et al*. (2012:13) highlight that management skills increase efficiency and drastically influence the organisation's performance abilities. Peterson and Van Fleet (2004:1298) state that organisations should give particular attention to the manager's skills as these skills ensure that managers are capable of effectively performing their duties when satisfying the functions of management. Moreover, management skills enable managers to reach the objectives of the organisation when applying managerial knowledge to the management functions. Lastly, management skills also improve the manager's ability to fulfil their roles correctly.

Management skills that are essential for sound management (Rudansky-Kloppers, 2013:177) consist of three key skills, namely conceptual, interpersonal and technical skills (Cunningham & De Kock, 2012:114; Gray & Callahan, 2008:81; Kaifi & Mujtaba, 2010:2; Kroon, 2008:60; Mujtaba *et al*., 2012:131; Oosthuizen, 2011:65; Peterson & Van Fleet, 2004:1299; Tajaddini *et al*., 2010:3). These skills can be described as follows:

- **Conceptual skills:** These skills relate to a manager's intellectual ability to view the organisation and its parts in a holistic manner (Gray & Callahan, 2008:81; Rudansky-Kloppers, 2013:177). Conceptual skills require managers to understand the broader contexts of a situation (Bates *et al*., 2005:26) in order to consider different solutions to a problem or situation and select the best one accordingly (Oosthuizen, 2011:65). Peterson and Van Fleet (2004:1300) add that a manager

needs to view the entire organisation in a systematic manner to create interrelations between the different work units, understand interactions and consider the effects of change on any unit within the organisation. Conceptual skills are of significant importance to top-level managers, as they need to establish a vision and mission for the entire organisation to enact on and primarily deal with the tasks of planning and organising the long-term direction for the organisation (Kaifi & Mujtaba, 2010:2).

- **Interpersonal skills:** These skills include the manager's ability to work with other people (Rudansky-Kloppers, 2013:177). Managers must have the ability to create relations with groups of people or individuals by leading, understanding and controlling their specific behaviour aspects and attitudes (Kaifi & Mujtaba, 2010:2). Kaifi and Mujtaba (2010:2) elaborate, stating that managers are considered to be effective if they are capable of using their interpersonal skills to communicate with, coordinate and motivate groups of people or individuals (Kaifi & Mujtaba, 2010:2). Interpersonal skills are found most essential when managers are required to provide feedback, coach and counsel the individuals they are currently managing, or reporting to other levels in the management hierarchy of the organisation (Peterson & Van Fleet, 2004:1300). Oosthuizen (2011:65) opines that especially middle managers require sound interpersonal skills, even though it is an essential skill for managers to have from all levels within the organisation.
- **Technical skills:** These skills are mostly knowledge based to a specific field or area and require a manager to utilise the specific knowledge, methods and techniques to fulfil a particular role or complete a task (Oosthuizen, 2011:66). Kaifi and Mujtaba (2010:2) state that these skills largely relate to the manager's particular position within the organisation. Peterson and Van Fleet (2004:1299) stress that these skills are vital to a manager as they enable the manager to be effective in training, directing and evaluating the employee's job performances for which they are responsible. Technical skills are especially useful to both lower management, as their role of work is largely of a practical nature (Cunningham & De Kock, 2012:115), and middle management, who require specific knowledge to complete their duties, such as that of a financial or marketing manager (Bates *et al*., 2005:27).

While it is important to recognise that an organisation may decide to promote an employee into a managerial position once the employee has gained the required managerial skills needed, managers in current positions may also be promoted to higher levels if the organisation feels the manager has developed further managerial skills. For example, a lower management employee with technical and interpersonal skills may be promoted to top-level management once the employee has acquired conceptual skills (Kaifi & Mujtaba, 2010:2; Mujtaba *et al*., 2012:131 Tajaddini *et al*., 2010:3). Peterson and Van Fleet (2004:1301) warn that even though the management skills are related to management level in the organisations hierarchy, all managers, irrespective of the level, need to have a combination of the management skills to perform their tasks effectively. In a similar respect, Ping *et al*. (2012:19) emphasise that management skills should not only be reflective of managers in large corporate organisations, but for managers, leaders and entrepreneurs of smaller organisations too.

The focus of the literature review in the preceding sections was on management in general, in terms of the definition, management tasks and skills. The following sections highlight the functions of management in relation to the management of specific departments, and not the organisation as a whole.

2.5 FUNCTIONAL MANAGEMENT OF THE ORGANISATION

The functions of management are implemented to divide assorted daily operations of the organisation into areas of specialisation (Jones, 2007:77; King *et al*., 2005:108). Hellriegel *et al*. (2008:9) differentiate between functional management and general management. Functional managers have extensive knowledge, experience and technical expertise in a specific area and overlook the activities and performance of employees within the particular department of the organisation. Functional managers are found in various management areas, relating to their domain of expertise, for example marketing, finance, human resources, sales and so forth. Conversely, general managers oversee the operations of the entire organisation and combine the performances of each department within the organisation. Rudansky-Kloppers (2013:176) encapsulates this by stating that functional managers are specialised managers that report to general managers. King *et al*. (2005:108) concur and add that

general management merges the activities and information relating to each function, often referred to as a department (Rudansky-Kloppers, 2013:176) in the organisation in order to achieve the overall goals and objectives.

Oosthuizen (2011:63) notes that every manager executes management tasks even though managers perform various functions in the organisation. Generally, the management tasks are implemented in the manager's respective departments. The main management functions pertaining to specific management areas found within the organisation are marketing management, public relations, human resource management, production and operations management, financial management, logistics management, purchasing management, administrative management and legal issues in managing an organisation.

Marketing management includes various activities utilised to ensure the organisation's products and services are sold to consumers. Thus, this function is responsible for providing products or services that satisfy consumer needs (Hugo *et al*., 2006:4). Marketing managers have to consider elements such as the product or service, pricing, communication and availability (Oosthuizen, 2011:64). An overview of marketing is important for this study and as such, a comprehensive outline of marketing management for the UBIs will be provided in Chapter 3 (Section 3.3).

Public relations is responsible for communicating information about the organisation with the external and internal public, which includes various parties such as the media, general public, potential investors, consumers, shareholders, employees and others (King *et al*., 2005:110). Public relations, through communication, promote an organisation's image in a favourable manner (Hugo *et al*., 2006:4).

Human resource management refers to the management of people in an organisation, namely the employees. This function has the responsibility of dealing with hiring and dismissing employees, employee remuneration, performance management, the general safety and wellness of employees, employee training and development and employee benefits, amongst others (Botha, 2012:210).

Production and operations management entails the management of operations within the organisations production systems, together with the manner in which the production process is planned and the design of the production system (Bates *et al*.,

2005:196). Moore *et al*. (2008:532) state that the management within this function is responsible for obtaining the necessary resources required and overseeing the transformation process. Therefore, management has to ensure that the inputs are transformed into outputs, either in the form of products or services in order to satisfy the consumers need.

Financial management, as a function, has the primary task of monitoring the organisations finances by obtaining money for the organisation and using it intelligently within the organisation (Bates *et al*., 2005:14). Botha and Musengi (2012:208) accentuate that the financial function has to keep accurate record of the flow of money, or assets, into and out of the organisation. Moreover, this function has to ensure that the organisation is and remains financially robust.

Logistics management is a process that utilises the management tasks and activities to monitor the flow of raw materials, semi-finished and final products from the point of origin to the point of final consumption (Van Rensburg, 2008:150). Dyck and Neubert (2009:417) add that logistics management utilises systems to deal with the movement of products into the organisation, while the products are being used in the organisation and the movement of products out from the organisation.

Purchasing management ensures that all the inputs required are available to produce the organisation's products or provide services (Bates *et al*., 2005:14). Hugo *et al*. (2006:4) concur, indicating that purchasing managers search for the best suppliers that can provide the organisation with high quality inputs, when and where they are needed, in the correct quantities and at the best possible prices.

King *et al*. (2005:109) state that administrative management supports all the other functions in the organisation by keeping accurate records of information that include, amongst others, payments made to suppliers, or by consumers. Administrative management has to ensure that they have the required information when decision-makers in the organisation need it (Botha, 2012:13).

Müller (2008:43) advises that managers should be aware of the legal issues relating to the operations of an organisation as failure to adhere to the legal aspects can result in possible fines or criminal prosecution. Bates *et al*. (2005:118) state that every country has specific laws and regulations to which organisations must prescribe. These laws

and regulations indicate the operations that are acceptable and are not acceptable. More specifically, the employees of the organisation, the natural environment and organisation taxes form part of the laws and regulations that an organisation must follow. Kiley (2011:40) highlights that legislation encompasses various laws, rules and regulations implemented by the government and includes issues such as the tax rate for organisations and labour laws. For the purpose of this study, taxation, labour relations, intellectual property protection and contracts will be discussed as a section of the organisation's legal environment.

- **Taxation**

In South Africa, organisational taxes include both direct and indirect taxes, which are determined by the South African Revenue Service (SARS). The direct taxes include individual income tax and organisation tax levied on the income of the organisation. In comparison, indirect taxes include value-added tax (VAT) that is levied on the supplies of products and services, customs duties and excise. Organisations are also requested to register their employees with SARS, where standard income tax on employees (SITE) and pay as you earn (PAYE) are deducted from the employees' salaries and wages (Müller, 2008:43). Corporate income tax (CIT), also referred to as business taxes, is levied on all organisations registered under South Africa's laws. Organisations must register as taxpayers with SARS and have to submit tax return documents annually, whereby taxes are paid on their annual turnover and provisional tax returns, which indicate estimates of their turnover every six months. Moreover, the current CIT rate is 28 percent (SARS, 2014).

- **Labour relations**

Labour relations refers to the management of human resources within an organisation and specifically relates to the rules and practices established between the employer and employee (Jones, 2007:423). Labour law is the foundation of labour relations, as labour relations should be based on the labour law of a particular country. The labour law specifies the rules and practices that should be established between the employer and employee and stipulates the needs of both parties (Bates *et al*., 2005:306). The Basic Conditions of Employment Act (75 of 1997) regulates the conditions for the labour law in South Africa. The purpose of The Basic Conditions of Employment

Act (75 of 1997) is,

> To give effect the right to fair labour practices referred to in section 23(1) of the Constitution by establishing and making provision for the regulation of basic conditions of employment; and thereby to comply with the obligations of the Republic as a member state in the International Labour Organisation; and to provide for matters connected therewith.

The rules and practices of this act include the ordinary working hours of employees, overtime, meal intervals and rest periods, work on Sundays, public holidays, leave, and termination of employment, amongst others. The Basic Conditions of Employment Act (75 of 1997) has been amended, with the most recent amendment in 2014.

Jones (2007:423) indicates that in some instances, the employer and employees cannot reach mutual agreement on certain issues, for example working conditions, salaries and wages, or other benefits. In such instances, trade or labour unions assist the employees as they stand for organisations that serve to protect and represent the interest of employees within a specific industry. Bates *et al*. (2005:308) state that managers should be aware that employees have the right to belong to trade unions through becoming members of the trade unions and paying membership fees. Moreover, various kinds of trade unions exist to serve and protect employees in specific industries.

- **Intellectual property protection**

Intellectual property protection refers to legalities involved in protecting a creation, either in the form of a product, organisation, or an idea, such as a service. Various kinds of intellectual property protections exist, with the most common being patents, trademarks and copyrights (Müller, 2008:47). A patent, issued by the South African Patent Office, protects a person's invention by means of prohibiting opportunities for other people to exploit any inventions based on the same principles. A patent is provided in the form of a written patent specification document that specifies the exact terms of the protection provided, for example the time frame of protection (SAIIPL, 2014). When a person is unable to patent his/her product, service or

organisation, a trademark can be used as an alternative. A trademark represents a specific symbol or name that is allocated to a product, service or organisation, which also allows for the easy identification of the product, service or organisation (Van der Walt, 2003:57). SAIIPL (2014) indicate that a trademark is not only restricted to a symbol or name and can also include devices, signatures, words, letters, numerals, shapes, patterns, colours or even a combination between these variables. The indication of a trademark, signified as ®, restrains other people from using a trademark of a similar nature. According to Jones (2007:165), a copyright is provided for the protection of written or visual works, books, textbooks, video games, poems and songs, amongst others, typically produced by authors, specialists, poets, musicians, novelists and any other related parties. A copyright, in comparison to patents and trademarks, has a long-term duration and does not require a formal registration process as the owners are automatically granted copyright protection once they develop their work (SAIIPL, 2014). Müller (2008:47) concurs, indicating that a copyright is usually specified by the authors signature and the word copyright, followed by the symbol © and date. Usually, a copyright protects the author's work for their entire lifespan and 50 years thereafter.

- **Contracts**

A contract is a formal written document between two or more parties that stipulates the formation of an agreement, whereby the parties involved are expected to carry out the obligations, or adhere to the terms of the agreement stipulated (Blomqvist *et al*., 2005:498). The importance of contracts is emphasised in organisations as a tool used for communication, to reduce the level of risk and uncertainty and to state agreements (Camén, 2010:319; Roxenhall & Ghauri, 2004:261). Busey (2005:198) indicate that organisations use contracts for multiple purposes, including leases, supplier contracts, purchasing contracts, employment contracts and service contracts. Müller (2008:48) highlights that entrepreneurs or managers should ensure that contracts are legal and valid. In order for a contract to be valid, the parties involved should agree to the terms indicated on the contract, the parties should have a contractual capacity, the contract should be realistic and lawful and the formalities should be accurate. Moreover, if these requirements are not present the contract will be non-void and thus, inapplicable, or the contract will be breached if one of the parties does not adhere to

the requirements of the contract.

The above section has examined the management of an organisation with specific focus on how organisations transform resources into products and services to meet consumers' needs and wants. However, in order to understand how organisations satisfy consumers' needs and wants in a market economy, an understanding of the driving force behind the organisation, namely the entrepreneur is essential (Ladzani, 2013:41). Therefore, the discussion now turns to entrepreneurship. The discussion on why small business management is important to entrepreneurs will follow this section.

2.6 OVERVIEW OF ENTREPRENEURSHIP

While, the recognition of entrepreneurship as a field of practice was identified in the eighteenth century, the interest in entrepreneurship grew in the nineteenth century (Kuratko & Hodgetts, 2007:33). Nieuwenhuizen (2004:7) emphasises that the interest of entrepreneurship has not only been restricted to researchers in the specific field, but also relates to other fields of practice, for example management and sciences. As such, researchers in other fields recognise entrepreneurship in a manner that could relate to their dominant fields of practice. Bates *et al*. (2005:45) suggest that when researchers or people have a profound interest in entrepreneurship, they can be known to have an entrepreneurial orientation. The following sections provide further insights into the field of entrepreneurship by defining entrepreneurship, identifying the importance of entrepreneurship and different types of entrepreneurial organisations, as well as defining an entrepreneur.

2.6.1 Entrepreneurship defined

Kobia and Sikalieh (2009:111) state that there have been many issues and challenges involved in defining the term entrepreneurship. Coulter (2003:3) indicates that the term entrepreneurship is not only difficult to define, but many people perceive the term differently and have various ways on how best to define it. As such, there exists little agreement on a generally accepted definition for the term entrepreneurship (Morrison, 2006:194).

Entrepreneurship is the process of utilising time and effort to create something different. Within this process, financial, physical and social risks may be undertaken.

However, one may reap the benefits of monetary rewards, personal satisfaction and independence from the process (Hisrich & Peters, 1995:10). Morrisette and Schraeder (2007:15) opine that entrepreneurship is a process in that it can be taught and learned. Moreover, entrepreneurship is driven by an opportunity that involves thinking, reasoning and acting. Afolabi (2015:49) and Nieuwenhuizen (2004:9) concurs and points out that entrepreneurship is viewed as a process due to individuals who pursue opportunities within the market and alter economic systems through innovations. Sudharani (2012:7) further elaborates that while entrepreneurship entails recognising opportunities within the market place, it is also about co-ordinating the necessary resources to follow the opportunities and investing in the resources to utilise the opportunities for the long-term benefits and growth. Moreover, entrepreneurship may create affluence through incorporating the necessary resources in different ways to start and run an organisation. Nieuwenhuizen (2004:9) concurs, indicating that entrepreneurship is the emergence and growth of new organisations. Kuratko and Hodgetts (2007:5) explain that entrepreneurship is more than a simple formation of organisations, but rather an integrated concept that infuses organisations from an innovative perspective. According to Murphy (2009:110), the process of entrepreneurship begins with an opportunity. Morrison (2006:194) adds that within the process of entrepreneurship, an opportunity is formed or apprehended despite of the resources that are personally controlled. Regardless of how entrepreneurship is defined, various topics appear in most definitions of entrepreneurship, such as an entrepreneur, innovation, uniqueness, growth, a process, producing something of value and providing value to a community or market place (Coulter, 2003:4).

2.6.2 Importance of entrepreneurship

In a worldwide context, the importance of entrepreneurship, as an agent in the generation of employment opportunities and as a contributor to sustainable economic development, has been recognised (Kroon *et al*., 2003:319; Lim & Xavier, 2015:105). Economic growth may be explained as the increase and development in resources and the speed of technical transformation, whereby land, human resources, capital and entrepreneurship form the essential resources in the factors of production (Bawuah *et al*., 2006:1). Entrepreneurship within developed economies acts as an essential element in stimulating declining economies and creating new employment

opportunities in order to manage unemployment issues. However, entrepreneurship plays a greater role within developing economies, whereby economic development and growth, employment formation, and social adjustment may be fuelled. As such, national economic policies are aimed at promoting the development of new organisations, as a means to encourage economic growth and wealth creation (Gurol & Atsan, 2006:26). Coulter (2003:12) adds that the development of new organisations supplies advantages to economic development in the form of product-process innovations, enlarged tax incomes, societal enhancements, and employment creation.

The South African economy is characterised by issues relating to slow economic growth, high unemployment rates and an unacceptable level of poverty (Ladzani, 2013:44). However, entrepreneurship is viewed as an essential element that can assist in the reduction of these issues (Van Vuuren & Groenewald, 2007:269). According to Van der Merwe and De Swardt (2008:450), entrepreneurship can improve the standard of living for South Africa's economy through generating employment opportunities.

Entrepreneurs are acknowledged as people that develop new products and services as a substitution to old products and services, and thus vastly contribute towards the economic development of an economy (Bawuah *et al*., 2006:2). The perseverance in an entrepreneur's spirit to develop new products and processes and to take risks, leads to innovations that are essential for the strength and vivacity of an economy. Moreover, without new developments taking place, the economic, technological, and social growth of an economy would be stagnant (Coulter, 2003:12). Entrepreneurial organisations, ranging from small, micro-, and medium-organisations to large national and international organisations, aim to achieve substantial levels of growth in their organisations. As a result of the growth within these organisations, growth within the economy can be obtained, and as such, it may be recognised that the various types of organisations establish the state of the economy. In turn, the employment sector of an economy is greatly determined by the state of the economy, whereby high levels of growth in an economy will provide more employment opportunities and low levels of growth will minimise employment opportunities within the economy (Nieuwenhuizen, 2004:4).

2.6.3 Types of entrepreneurial organisations

Entrepreneurial businesses are established for the primary purpose of generating a profit and achieving high levels of growth (Nieuwenhuizen, 2004:10). Ladzani (2012:29) states that entrepreneurial businesses will show growth when their turnover increases, higher profits are gained, more people are employed in the business, more assets are purchased and the latest technology is utilised within the business. Kuratko and Hodgetts (2007:4) highlight that entrepreneurial businesses use innovative strategic practices to achieve the high levels of growth and profitability.

According to Nieuwenhuizen (2011:363), entrepreneurial businesses can be classified into informal, micro, small, medium or large businesses as a result of each business's unique characteristics, requirements and features. These businesses can be explained as follows:

- **Informal business sector:** Businesses established within the informal business sector are not registered as a business or with the Receiver of Revenue (SARS) and, therefore, do not pay taxes. As a result, these businesses are excluded from the country's national accounts. Moreover, this type of business is established solely out of a need for survival. Examples include street vendors, hawkers or spaza shops (Ladzani, 2012:37).
- **Micro and small business sectors:** A micro business is recognised as a business that produces minimal profits (Moore *et al*., 2008:13). One, or only a few people who do not intend to achieve high levels of growth and innovation, establish a small business (Kuratko & Hodgetts, 2007:4). As this study is mainly concerned with SOs, Section 2.10 provides a complete definition and discussion pertaining to micro and small businesses.
- **Medium and large business sectors:** Nieuwenhuizen (2011:366) states that medium and large businesses are usually characterised by high levels of growth that are achieved through expansion and diversification. In general, a medium-sized business employs fewer than 200 people, whereas larger organisations employ more than 200 people.

Entrepreneurship extends beyond the point of simply establishing an organisation, even though the importance of entrepreneurship is focused on this principle. Instead, entrepreneurship also involves entrepreneurs who seek innovative opportunities, take unsecured risks and endeavour to pursue an idea through to realism. Hence, in the simplest of theoretical forms of studying entrepreneurship, entrepreneurs initiate entrepreneurship (Kuratko & Hodgetts, 2007:4) and, therefore, the definition of an entrepreneur needs to be explored.

2.6.4 Entrepreneurs defined

Often, the term entrepreneurship is used interchangeably with the term entrepreneur and even though the two concepts are very similar in nature, they have different meanings (Sudharani, 2012:7). As is the case with the term entrepreneurship, the term entrepreneurs may be problematic and difficult to define. Therefore, there are many different ways in which entrepreneurs may be defined and there exists little consensus on a general definition of the term (Nieuwenhuizen, 2004:9).

The direct translation of the term entrepreneur is to "undertake" or "one who takes in between" (Deakins & Freel, 2003:3) as derived from the French word *entrepredre* (Sudharani, 2012:6). According to Moore *et al.* (2008:6), an entrepreneur is an individual who commences the origin of an enterprise and sees the enterprise through its processes. An entrepreneur combines various factors of production in order to introduce changes and innovation to establish something of greater value (Hisrich & Peters, 1995:9). Nieuwenhuizen (2004:9) reiterates that an entrepreneur will strive to begin and manage an enterprise for the main intention of generating profits and growth. Kuratko and Hodgetts (2007:4) state that entrepreneurs have the potential to spot opportunities where others may regard it as chaos and confusion. An entrepreneur is seen as someone who has the mindset and vision to identify an opportunity and undertake the risks of acting upon it through starting an organisation (Ladzani, 2013:42). Deakins and Freel (2003:3) and Indumathi and Akila (2015:70) identify entrepreneurs to be pure-risk takers with the resulting reward being the ability to generate profits.

The entrepreneur forms a crucial element of entrepreneurship, as without an entrepreneur, entrepreneurship will cease to exist (Coulter, 2003:4). Nieuwenhuizen

(2004:9) has identified some important features that are common to both the definitions of entrepreneurship and entrepreneurs. These features include, the ability to recognise and act upon an opportunity, being innovative and creative, an organisation is developed or an existing organisation is bought over, significant emphasis on the growth of the organisation, personal and financial risk taking, rewards in the form of profit, and there should be a sufficient level of managing the organisation through its processes.

2.6.5 Creativity and innovation

Coulter (2003:11) highlights that innovation represents a major function of entrepreneurial activity as the creative drive within entrepreneurs lead to the development of new ideas and technological changes. Deakins and Freel (2003:166) concur, suggesting that creativity is linked closely to the establishment of new products or services, enhancements to the quality of existing products or services, the development of new processes and procedures, and the opportunity of launching a new market. According to Crumpton (2012:99), various types of innovation exist, which can be noticed when organisations modify their offerings to suit consumers' demand, when suppliers alter their products or services to enhance their efficiency, and when new organisations are opened in the market to create solutions to innovative issues.

Nieuwenhuizen (2004:14) emphasises that even though many entrepreneurs recognise the vital significance of innovation, the risks involved often inhibit an entrepreneur's potential to develop new products or services. Thus, the entrepreneurs of SOs frequently enter markets by modifying or enhancing existing products and services. However, Moore *et al*. (2008:17) state that SOs are known to be the leaders in innovation. Crumpton (2012:98) exclaims that the risks associated with innovation are created by the anxiety of doing something out of the ordinary.

This section has provided an overview on entrepreneurship and entrepreneurs. While entrepreneurship is the process of establishing successful organisations, much of the success depends on the entrepreneur's skills and abilities, which are learned from the entrepreneurial process (Ladzani, 2013:54). For this reason, the entrepreneurial process is important for the entrepreneur and is discussed next.

2.7 ENTREPRENEURIAL PROCESS

Nieuwenhuizen (2004:20) indicates that the entrepreneurial process is recognised as the procedure initiated when entrepreneurs develop new organisations. The entrepreneurial process may be viewed as a managerial behaviour that continuously makes use of opportunities in the marketplace in order to convey advantages ahead of one's individual potential (Thompson, 1999:209). However, Hisrich *et al*. (2005:38) warn that the entrepreneurial process goes beyond the general managerial tasks, such as problem solving. Instead, the process necessitates that the entrepreneur searches for an idea and creates an opportunity in order to overcome the barriers impeding the development of new products or services. Nieuwenhuizen (2004:20) states that the entrepreneurial process forms as the entrepreneur assembles all the resources required to optimally shape the new organisation and as such, follow the opportunity.

Deakins and Freel (2003:55) emphasise that the entrepreneurial process is time consuming and cannot be done in a hurry since ideas are developed over a period of time and may even be redefined and re-examined a few times before the organisation is opened. The entrepreneurial process consists of four phases, namely identify and evaluate the opportunity, develop the business plan, determine the resources required, and start and manage the enterprise (Hisrich *et al*., 2005:38; Nieuwenhuizen, 2004:20).

Ladzani (2013:54) suggests that care should be taken when referring to the entrepreneurial process as a basic procedure for entrepreneurs as every organisation will have unique attributes in their development phases and each entrepreneur may undertake different approaches to establishing their organisations. Coulter (2003:14) concurs and indicates that even though entrepreneurs' situations may differ, the entrepreneurial process may be viewed as a general set of decisions that entrepreneurs encounter whilst developing their organisations. While the entrepreneurial process does not guarantee the success of a new organisation it does serve, however, as a valuable framework for decision making, through providing a logical sequence of steps (Ladzani, 2013:55), which are discussed in the next section.

2.7.1 Identify and evaluate the opportunity

Opportunity identification is described as the procedure undertaken by an entrepreneur when a potential opportunity is recognised for a new organisation (Hisrich *et al*., 2005:38). Moore *et al*. (2008:4) have identified that an entrepreneurial opportunity is an attractive and timely opportunity that adds value for prospective consumers and final users. Nieuwenhuizen (2004:20) explains that an opportunity is created when the current entrepreneurs occupying the market overlook an idea that could be a potential opportunity. Conversely, not every idea can be transformed into a good opportunity.

The procedure of identifying and evaluating a superior opportunity is not as easy as it may seem, as an entrepreneur has to search for possible opportunities, be vigilant towards any possibilities within the market or structure methods to help identify possible opportunities (Hisrich & Peters, 1995:30). Nieuwenhuizen (2004:21) concurs, indicating that entrepreneurs should be concentrated on searching for innovative ideas that can be transformed into viable opportunities. In the search for creative ideas, entrepreneurs can utilise various methods, such as their personal skills, expertise or abilities, shared needs, current unsettled problems, and even daily activities. Deakins and Freel (2003:60) suggest that opportunities may also be formed by changes in the market or economy, such as political, economic, social, demographic or technical changes. According to Timmons and Spinelli (2009:112), a potential opportunity may be recognised through discrepancies within existing products or services or the quality of products or services, a lack of knowledge and information within the market and changes within the market conditions. Furthermore, poor lead and lag times that might exist for current products or services and products or services that are being discontinued also provide potential entrepreneurial opportunities.

2.7.2 Develop the business plan

A business plan is described as a formal document that is used to explain and outline the basic idea fundamental to the development of a new organisation and the associated start-up concerns. The business plan acts as a blueprint for the entrepreneur and contains important elements of direction for the entrepreneur and the organisation

(Moore *et al*., 2008:151). The development of a business plan is essential in the entrepreneurial process since it defines and highlights the value of the opportunity identified. However, this may be one of the most complicated steps in the entrepreneurial process, as an entrepreneur may not have the required knowledge on how to prepare a business plan (Hisrich & Peters, 1995:33).

Struwig (2004:91) highlights that a business plan can assist in reducing a new organisation's risk of failure through encouraging entrepreneurs to think cautiously and consider every facet of the organisation. As a result, the plan may be adjusted and alternative courses of action may be decided upon. Furthermore, a business plan can assist the entrepreneur in obtaining funds as an investor or lender will need to know more about the organisation it is lending capital to, or in the case of an investor, making an investment in the organisation. Hisrich and Peters (1995:111) concur, stating that an investor will not consider making an investment in the organisation until the business plan is complete. Therefore, a well-planned business plan is necessary for widening the opportunity, identifying the resources needed, acquiring the resources and effectively managing the organisation (Hisrich *et al*., 2005:40). Owning to the importance of a business plan, a complete discussion of the business plan follows in Section 2.9.

2.7.3 Determine the resources required

Resources are the main elements required to begin and operate an organisation and as such, resources are essential to an entrepreneur as they enable the entrepreneur to follow business opportunities (Jacobs, 2004:111). Entrepreneurs should determine the resources they require in order to exploit the opportunity identified and defined. It is important that the amount and variety of resources needed be identified, as crucial resources may often be overlooked. However, the fundamental resources required should be distinguished from the resources that add less value to the opportunity (Hisrich & Peters, 1995:33). Jacobs (2004:111) adds that an organisation may be unable to operate effectively if it has an inadequate amount of resources or an unsuitable combination of resources.

Timmons and Spinelli (2009:377) suggest that the resources required may include people, financial resources, assets, and a business plan. In this instance, people may

refer to managers, lawyers, accountants and so forth, and assets may include land and equipment. Similarly, Coulter (2003:66) indicates that an organisation may require financial, physical, human, intangible, and structural or cultural resources. Financial resources are linked to the ability to borrow capital, establish lines of credit, and manage cash reserves and so forth, whereas physical resources refer to tangible assets such as buildings, equipment, fixtures, raw materials, office space, and manufacturing facilities. Human resources relate to the organisation's employees, intangible resources refer to brand names, patents, trademarks, copyrights and registered designs, and structural or cultural resources comprise organisational histories, culture, work systems, policies and so on.

2.7.4 Start and manage the enterprise

Hisrich and Peters (1995:34) indicate that entrepreneurs are able to start and manage the organisation once they have acquired all the necessary resources. The challenge created within this phase of the entrepreneurial process involves managing the resources throughout the execution of the business plan and handling any issues that may arise on the operational side of growing the organisation. According to Coulter (2003:328), the decision to grow an organisation is planned and forms part of the organisation's overall business plan. Nieuwenhuizen (2004:21) states that the organisation may be small at first, with few employees. However, the key principles for success of the organisation will need to be re-evaluated when the organisation begins to grow.

According to Ladzani (2013:58), before starting a new organisation, it is critical that entrepreneurs examine the business life-cycle phase of the relevant industry in order to develop appropriate strategies. For this reason, the entrepreneurial business life cycle is essential to entrepreneurial success and is discussed next.

2.8 ENTREPRENEURIAL BUSINESS LIFE CYCLE

A business life cycle is crucial as it used to explain the development phases a business passes through in its existence (Kuratko & Hodgetts, 2007:610; Phan *et al*., 2014:788). Pretorius (2004:294) suggests that a business passes through five phases, namely pre-start-up, start-up, growth, maturity and decline phases. Similarly,

Timmons and Spinelli (2009:309) state that research and development, start-up, high growth, maturity and stability form the five major phases of a business's development. However, Kuratko and Hodgetts (2007:611) indicate that the businesses first phase is to develop the new venture, which then is followed by the start-up phase, growth, stabilisation and innovation or decline. For the purpose of this study, the business life-cycle phases will be recognised as pre-start-up, start-up, growth, maturity and decline. These business life-cycle phases can be presented graphically as illustrated in Figure 2.2.

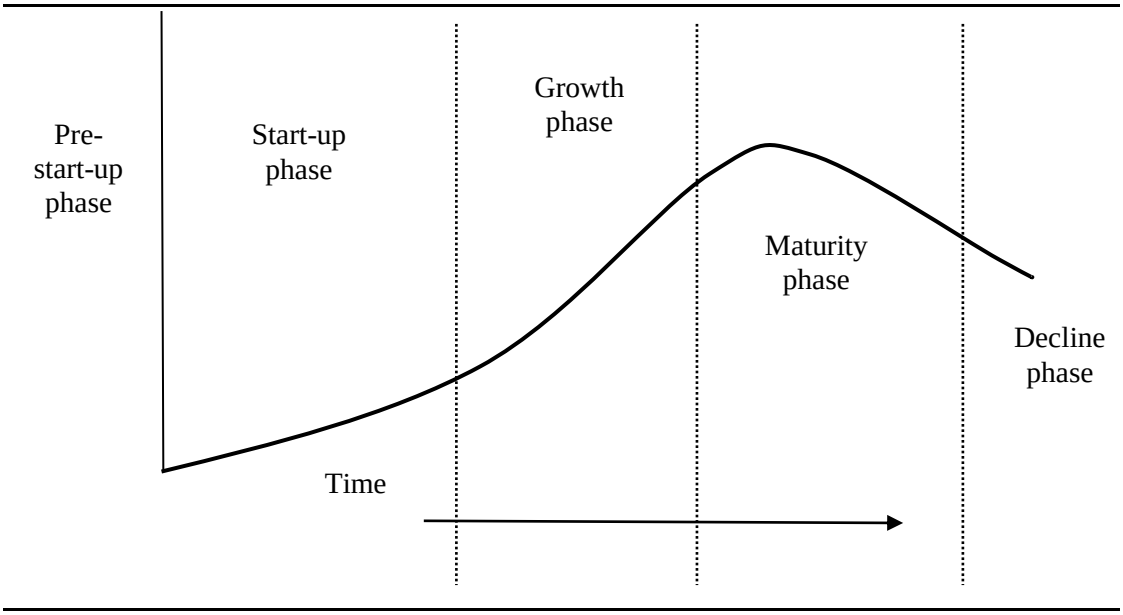


Figure 2.2 The business life-cycle phases (Nieman, 2004:238)

The business life-cycle phases, namely pre-start-up, start-up, growth, maturity and decline can be explained as follows:

- **Pre-start-up phase:** During the pre-start-up phase, the entrepreneur will envision the business in a conceptual manner and inform investors about the potential opportunity of the business in order to gain funding for the start-up phase (Pretorius, 2004:294). Timmons and Spinelli (2009:310), who refer to this phase as the research and development or nascent phase, propose that during this phase, the entrepreneur thoroughly researches the business idea to identify the viability of the business in terms of its potential. Furthermore, through researching the viability of the business, any pitfalls or threats can be identified and if possible, avoided. Bridge *et al*. (2003:192) highlight that the pre-start-up phase will begin

when the entrepreneur starts the preparation for the business and ends when the business is started. The major activities of this phase are recognised by the entrepreneurs' identification and complete analysis of the business idea, the entrepreneur obtaining the required knowledge and skills including allocating contacts that would show willingness to assist.

- **Start-up phase:** The start-up phase is when the business begins its operations. During this phase, the entrepreneur will be concentrated on the marketing and distribution aspects of the business (Phan *et al*., 2013:789). Bridge *et al*. (2003:200) suggest that the main focus of entrepreneurs within this phase will be to acquire capital funds, support, consumers, suppliers, employees, business premises, information and advice, management skills and infrastructure. Pretorius (2004:294) emphasises that businesses within the start-up phase experience high levels of risk and uncertainty, which could also lead to failure.

- **Growth phase:** In this phase, entrepreneurs are more focused on the expansion of their businesses concerning product line extensions, innovation and diversification (Phan *et al*., 2013:789). Pretorius (2004:294) states that the business will be characterised by an increase in demand, leading to higher sales levels and greater profit margins during the growth phase. However, competitive pressures in the market will also be present.

- **Maturity phase:** The maturity phase of a business is signified by tough levels of competition, which lead to the market becoming oversupplied. The increasing pressures of competition force businesses to re-consider their pricing strategies as businesses with higher prices will suffer immensely from lower profit margins (Wang *et al*., 2013:999). Timmons and Spinelli (2009:310) highlight that entrepreneurs no longer concern themselves with survival during this phase, but rather steady and stabilised profitability. Kuratko and Hodgetts (2007:611) state two possible options for this phase, the first being that businesses can swing into greater profitability through innovation, or the business can be led into decline and even failure.

- **Decline phase:** During the decline phase, businesses experience a drastic decrease in sales and lower profit margins. Entrepreneurs are mostly unaware that their businesses are entering the decline phase and as such, the prevention of this phase

occurs once the business is already in the phase (Pretorius, 2004:295). Therefore, the decline phase of the business life cycle did not form part of this study.

The business life-cycle phases are equally important due to every phase having its own unique characteristics and set of strategies (Kuratko & Hodgetts, 2007:612). Bridge *et al*. (2003:188) indicate that even though the phases differ from each other, it is difficult to estimate when the business will transition from one phase into the next phase. For example, Timmons and Spinelli (2009:309) predict that it can take between 12 and 18 months for the business to transition between the pre-start-up phase to the start-up phase, three to four years before the business transitions to the growth phase, and 10 years before the business reaches maturity. However, these are seen to be estimates according to the suggestions of Van Tonder and Van Scheers (2011:571), as every businesses operation is different and one business might take a longer period of time to transition to the next phase than another business. Moreover, the business life-cycle phases do not generally have to appear in the precise order. In this sense, a certain business may transition from the growth phase directly into the decline phase, or a business could move into the growth phase following from the maturity phase. As such, it is important to note that the business life cycle is only a general model of life-cycle phases that businesses have in common. However, as every business differs in its unique conditions, so will its business life cycle.

In relation to the business life cycle, businesses in their pre-start-up and start-up phases are often referred to as young or nascent businesses, whereas businesses in phases further than the start-up phase are referred to as old or mature businesses (Kuhn & Marsick, 2005:32; Reynolds *et al*., 2005:210; Van Stel *et al*., 2007:172). Young businesses experience high levels of uncertainty and are limited by the lack of development in the early phase of the business, for example, their reputation has not yet been established, including their consumer or credit bases. In comparison, mature businesses return higher levels of profit, are able to cover their expenses, have a developed consumer base and are capable of product or service diversification (Fort *et al*., 2013:524). The age of the business is a major factor that is used to differentiate young and mature businesses from each other. For this differentiation, young businesses are known to have been in operation for five years or less, whereas mature businesses have been in operation for six years or more (Chavis *et al*., 2010:11; Fort

et al., 2013:521). For the purpose of this study, the age of the business was used as a criterion to differentiate between young and mature businesses, where young businesses have been in operation for five years or less and mature businesses have been in operation for six years or more.

Planning, as the fundamental element of management, predetermines what and how the entrepreneur proposes to accomplish with the organisation, which is outlined in the business plan (Strydom, 2013:88). Therefore, the following section explains the business plan essential to any type of business.

2.9 THE BUSINESS PLAN

A business plan can be defined as a written document used to describe all the internal and external factors surrounding the operations of an organisation (Lancaster, 2008:162). A business plan is used to show all the imaginable aspects of planning for a new organisation through answering the questions of where, when and how the entrepreneur intends to begin the operations of an organisation and what would make the organisation a success (Bates *et al*., 2005:78). Nieuwenhuizen (2011:384) states that a business plan is useful to new organisations as it serves as an indication of where the new organisation is heading and how the organisation's objectives will be reached. However, business plans are not only intended for new organisations, existing organisations can also make use of business plans to show how the organisation will grow or expand (Botha & Robertson, 2014:249). Ladzani (2012:34) concurs, indicating that the development of a business plan should not be viewed as a once-off plan that is finalised on completion. Instead, an organisation should continue updating its business plan to adapt to the changes that are constantly occurring in and around the organisation's environment.

A business plan serves multiple functions. However, the primary functions of a business plan are to act as a guide for management to follow, to plan the future aspects of the organisation and determine the goals, objectives and strategies that will be used to attain the future aspects (Nieuwenhuizen, 2011:384). In addition, a business plan can also assist in obtaining funds for the organisation and tell investors about the potential of the organisation (Strydom, 2013:88). Dyck and Neubert (2009:179) express that through developing a business plan, entrepreneurs are forced

to analyse the minor aspects of the organisation before actually opening the organisation. As such, the entrepreneurs are also able to identify flaws in the plans and correct them before they occur (Parks *et al*., 2015:16). Lancaster (2008:162) is in agreement, indicating that the entrepreneur considers various situations when developing the business plan, which involve situations that could be in favour of the organisation and those that are not. Consequently, this leads to reducing the risk of opening the organisation.

According to Jones (2007:96), a business plan contains very important and valuable information for organisations to operate effectively. First, a business plan stipulates the types of products or services the organisation plans to offer, how they intend to manufacture their products and how they will get consumers to purchase their products or services. In addition, the competitors of the organisation are identified through a business plan. Lastly, the business plan will stipulate how an entrepreneur intends to obtain the required resources, and how these resources will be utilised and organised within the organisation. The following section describes the contents of a business plan.

2.9.1 Contents of a business plan

Lancaster (2008:165) states that each organisation will have a different and unique business plan that will be suited to their specific situations. Nieuwenhuizen (2011:384) concurs, indicating that when developing a business plan, the entrepreneur should consider the size and composition of the organisation, growth of the market, manufacturing technology, service complexity and competitiveness.

A business plan can be developed in different ways (Dyck & Neubert, 2009:179). Lancaster (2008:165) cautions that while there is no single standard list of business plan components to guarantee success, there is considerable agreement as to what the content of the business plan should be. The most important components of the business plan include a cover page and table of contents, the executive summary, an overview of the organisation, the products or services plan, marketing plan, operating plan, management plan, financial plan and an appendix (Bates *et al*., 2005:78; Ladzani, 2012:34; Lancaster, 2008:165; Nieuwenhuizen, 2011:385). The following section gives attention to the different components of a business plan.

- **Cover page and table of contents:** The business plan begins with the cover page (Strydom, 2013:92) and should contain the full name of the organisation, the name of the entrepreneur, the street and postal address of the entrepreneur and the date the business plan was developed (Bates *et al*., 2005:78). The table of contents lists all the headings provided in the business plan, together with the exact page numbers on which they can be found (Ladzani, 2012:35).
- **Executive summary:** While the executive summary, an overview of the total business plan, is written only after the other sections of the plan are completed, it appears first in the plan, ideally creating enough excitement to motivate the reader to read on (Strydom, 2013:94). It is the most important element of the business plan, as most people do not read the entire business plan. Therefore, Lancaster (2008:165) believes that the executive summary should capture the reader's attention and highlight the major aspects of the plan. Nieuwenhuizen (2011:386) advises that the executive summary should include the opportunity, growth aspects, the organisational team, the organisations value, market penetration and the resources required for the operations of the organisation.
- **Organisation overview:** The organisation overview gives a description of the organisation, by describing the type of organisation, its history if it already exists, as well as the legal requirements of the organisation (Strydom, 2013:94). The organisation overview should also provide a description of the organisation's strengths, weaknesses, opportunities and threats (SWOT analysis) (Bates *et al*., 2005:78).
- **Product or service plan:** The product or service plan should give a complete description of the product and/or service, including its unique features (Strydom, 2013:94), the competitors, the consumers, legal protection of the product or service and any opportunities for expansion (Lancaster, 2008:167). Strydom (2013:94) points out that in this component of the business plan it must be clear why consumers will purchase the product or service.
- **Marketing plan:** The marketing plan details the target market for the organisation's products and services, the market size, growth and segments of the target market, together with the projected sales forecast for the first 12 months of operating (Nieuwenhuizen, 2011:388). Lancaster (2008:167) states that this

component of the plan should also include the organisation's competitors, pricing strategies or credit policies, distribution channels and communication channels. Strydom (2013:94) encapsulates this stating the marketing strategy, specifying the organisation's competitive edge, is outlined in the marketing plan.

- **Operations plan:** This component should comprise the human resources necessities, the organisational structures and the manufacturing or service processes. The manufacturing or service processes should contain complete descriptions of how the organisation's inputs will be transformed into outputs (Ladzani, 2012:35).
- **Management plan:** The management plan identifies the organisation's key role players, such as the active investors, management team and directors, as well as their experience and competence (Strydom, 2013:94). Dyck and Neubert (2009:181) believe that the management plan should illustrate that the organisation has the required management teams to operate the organisation successfully.
- **Financial plan:** The financial plan specifies and contemplates the financial needs and the sources of finance (Strydom, 2013:94). The purpose of the financial plan is to illustrate that the organisation has the potential to generate profits. Typical explanations included in this section define the establishment costs needed and the operating costs in terms of the employees, facilities, promotion methods and administration (Nieuwenhuizen, 2011:389). Bates *et al*. (2005:79) indicate that financial projections should also be provided in the form of break-even analysis, income statements, balance sheets and cash flow statements.
- **Appendices and references:** The appendices are placed at the end of the business plan, which include any supporting materials such as letters, curricula vitae, legal documents, contracts, photographs, market surveys, financial statements and any other relevant information (Lancaster, 2008:169). Nieuwenhuizen (2011:391) states that a list of references used in the business plan should also be included at the end of the plan.

2.9.2 Reasons for business plan failure

Lancaster (2008:169) states that there are multiple reasons for a poorly designed business plan that will ultimately lead to the failure of the plan and consequently, the failure of the organisation. The most important reasons for the failure of a business plan can be noted when the entrepreneur or manager of the organisation sets unrealistic goals or the goals set are not measurable. Moreover, the business plan can also lead to failure if the entrepreneur, who develops the business plan, does not have the required knowledge and skills to do so. Mullins (2010:92) adds that a business plan is likely to fail if it is concentrated on the entrepreneur and not on the consumers' needs. This is critical as potential investors are focused on the organisation creating value for the consumer through satisfying their needs and in turn producing profits for the organisation. Jones (2007:96) concurs, indicating that entrepreneurs or managers can develop false assumptions on the real needs of consumers. Furthermore, another reason for the failure of a business plan could be that the costs of manufacturing the product or delivering the service have been underestimated, which will lead to expenses exceeding revenues and thus unprofitable organisations.

This section provided an overview on the business plan in accordance with the contents of a business plan and the reasons for the business plan failure. Dyck and Neubert (2009:174) suggest that there is a strong relationship between entrepreneurship and the management of SOs because the entrepreneurs and managers of SOs are mostly the same person. This thereby indicates that the entrepreneur becomes the manager of a SO and vice versa. As such, the management of SOs is an important issue in entrepreneurship and is discussed next.

2.10 INTRODUCTION TO SMALL ORGANISATIONS

Thurik and Wennekers (2004:141) state that there is a strong link between SOs and entrepreneurship, as SOs are being utilised as a vehicle for entrepreneurship and a mechanism for innovation and competitive advantages. According to Strydom (2011:10), entrepreneurs utilise SOs to become independent and generate wealth.

It should be noted that small and medium enterprises (SMEs) is a term utilised mainly in international contexts, whereas South Africa only uses the term small, medium and micro enterprises (SMMEs). However, both terms are known to have the same meaning (Mohsam & Van Brakel, 2010:2). Therefore, for the purpose of this study, the acronym for small, medium and micro enterprises (SMMEs) will be used, together with SOs. This section focuses on defining SOs in South Africa, explaining the importance of SOs and outlining the general management principles of SOs. The final sections of SOs explain the challenges encountered by SOs in South Africa and the support systems for SOs in South Africa.

2.10.1 Defining a small organisation

As this study is mainly concerned with SOs, it is important to define the SO. Although a brief definition of the SO has been given already in Section 2.6.3, for the purpose of this study a more comprehensive definition is required. Definitions on SOs may be misleading (Deakins & Freel, 2003:37) because researchers occasionally use the terms small business owner and entrepreneur interchangeably (Kuratko & Hodgetts, 2007:4). However, even though small business owners and entrepreneurs are similar, the definitions of these terms are dissimilar and essential divergences can be noted on the terms (Coulter, 2003:9; Moore *et al*., 2008:6; Thurik & Wennekers, 2004:140). The term entrepreneur has been defined in Section 2.6.4, whereas the following section focuses on defining SOs.

Co *et al*. (2007:9) indicate that SOs may be defined economically or statistically, whereby qualitative means will be used economically and quantitative means will be used statistically. Qualitative means include the use of information to define SOs, whereas quantitative means make use of numbers and statistics to define SOs. Moore *et al*. (2008:7) state that SOs are often defined statistically, using specific criteria, such as the number of employees within the organisation, sales volume realised by the organisation per annum, and the value of assets owned by the organisation. Bridge *et al*. (2003:1983) explain that the majority of researchers define SOs by using the number of employees within the organisation. However, even when the number of employees is used, there is still no general definition of SOs.

For the purpose of this study, the focus will merely be on providing the definition and

criteria for SOs in South Africa. However, Co *et al*. (2007:9) highlight that various countries have developed their own criteria for defining SOs in order to complement their specific context. Hashim and Abdullah (2000:65) proclaim that many countries utilise different standards and criteria to measure the size of SOs. As such, the definition of SOs varies from country to country (Gardner *et al*., 2014:191).

In South Africa, the National Small Business Amendment Act (29 of 2004) defines a small enterprise as,

a separate and distinct business entity, together with its branches or subsidiaries, if any, including co-operative enterprises, managed by one owner or more predominantly carried on in any sector or subsector of the economy mentioned in Column 1 of the Schedule and classified as a micro-, a very small, a small or a medium enterprise by satisfying the criteria mentioned in Columns 3, 4 and 5 of the Schedule. (Refer to Table 2.1).

Moreover, the National Small Business Amendment Act (29 of 2004) defines a small enterprise organisation as,

any entity, whether or not incorporated or registered under any law, consisting mainly of persons carrying on small enterprise concerns in any economic sector, and established for the purpose of promoting interests of or representing small enterprise concerns, and includes any federation consisting wholly or partly of such association, and any branch of such organisation.

Table 2.1 illustrates the criteria, listed in Columns 3, 4 and 5, for classifying micro, very small, small or medium enterprises.

Table 2.1: Schedule from the National Small Business Amendment Act (29 of 2004)

Column 1	Column 2	Column 3	Column 4	Column 5
Sector or sub-sector in accordance with the Standard Industrial Classification	Size of class	The total full-time equivalent of paid employees	Total turnover	Total gross asset value (fixed property excluded)
Agriculture	Medium	100	R5 m	R5 m
	Small	50	R3 m	R3 m
	Very small	10	R0.50 m	R0.50 m
	Micro	5	R0.20 m	R0.10 m
Mining and quarrying	Medium	200	R39 m	R23 m
	Small	50	R10 m	R6 m
	Very small	20	R4 m	R2 m
	Micro	5	R0.20 m	R0.10 m
Manufacturing	Medium	200	R51 m	R19 m
	Small	50	R13 m	R5 m
	Very small	20	R5 m	R2 m
	Micro	5	R0.20 m	R0.10 m
Electricity, gas and water	Medium	200	R51 m	R19 m
	Small	50	R13 m	R5 m
	Very small	20	R5.10 m	R1.90 m
	Micro	5	R0.20 m	R0.10 m
Construction	Medium	200	R26 m	R5 m
	Small	50	R6 m	R1 m
	Very small	20	R3 m	R0.50 m
	Micro	5	R0.20 m	R0.10 m
Retail and Motor Trade and Repair Services	Medium	200	R39 m	R6 m
	Small	50	R19 m	R3 m
	Very small	20	R4 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m

Table 2.1: Schedule from the National Small Business Amendment Act (29 of 2004) (continued…)

Column 1	Column 2	Column 3	Column 4	Column 5
Sector or sub-sector in accordance with the Standard Industrial Classification	Size of class	The total full-time equivalent of paid employees	Total turnover	Total gross asset value (fixed property excluded)
Wholesale trade, commercial Agents and allied services	Medium	200	R64 m	R10 m
	Small	50	R32 m	R5 m
	Very small	20	R6 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m
Catering, accommodation and other trade	Medium	200	R13 m	R3 m
	Small	50	R 6 m	R1 m
	Very small	20	R 5.10 m	R1.90 m
	Micro	5	R0.20 m	R0.10 m
Transport, storage and communications	Medium	200	R26 m	R6 m
	Small	50	R13 m	R3 m
	Very small	20	R3 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m
Finance and business services	Medium	200	R26 m	R5 m
	Small	50	R13 m	R3 m
	Very small	20	R3 m	R0.50 m
	Micro	5	R0.20 m	R0.10 m
Community, social and personal services	Medium	200	R13 m	R6 m
	Small	50	R6 m	R3 m
	Very small	20	R1 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m

* R = Rand
** m = million

Source: National Small Business Amendment Act (29 of 2004)

For the purpose of this study, SOs will be defined as an organisation that is operated and managed by one or only a few individuals, where in most situations the owner and manager is the same person. The focus will be on SOs defined by means of the criterion of total full-time equivalent of paid employees (Column 3). As such, SOs will be defined as an organisation that has up to a maximum of 50 employees.

2.10.2 Importance of SOs

Over the past few decades, growth in the South African economy has declined. While it is the combination of SMMEs, large national and international businesses that determine the state of the economy, it is high-potential entrepreneurs, focused on growing their businesses, who are responsible for growth and employment creation in the economy (Ladzani, 2013:44). For this reason, the SMMEs sector has been one of the main concentration areas for the South African government since 1994, and as such, a great deal of focus is directed towards policy structures for SMMEs (Department of Trade and Industry, 2010:1). In South Africa, SMMEs are extremely important as they assist in overcoming the challenges of job creation, economic development and economic growth (Mohsam & Van Brakel, 2010:2; Department of Trade and Industry, 2010:1; Njiro & Compagnoni, 2010:148).

Unemployment has been identified as a factor hindering South Africa (Davies & Thurlow, 2010:437) as it has created a decline in the social and economic growth rate of the country (Bezuidenhout & Nenungwi, 2012:11658). South Africa's current unemployment rate is 24.7 percent (Stats SA, 2013:iv). In order to decrease the unemployment rate, employment opportunities need to be created. Nieuwenhuizen (2011:356) highlights that in South Africa, 97.5 percent of all organisations comprise SMMEs. According to Swart (2011:10), in South Africa, SOs are responsible for providing 80 percent of the employment opportunities.

In 2009, Stats SA (2009:xiii) determined that unemployment is the main reason why people start their own businesses. In the FinScope South Africa Small Business Survey (Finmark Trust, 2010:7), it was estimated that there are almost six million SOs in South Africa and 5.6 million small organisational owners. On average, one in every six individuals, over the age of 16 years, produce revenue through small business activity.

Mohr and Fourie (2004:588) define economic development as the improvement of the living standards in less developed economies. In comparison, economic growth is the increase in the overall production or income of an economy measured on an annual basis. Rogerson and Rogerson (2012:41) state that local economic development is very important for a country's survival, growth and vitality. However, in many parts of Africa, especially South Africa, local economic development has become a major obstacle. Kongolo (2010:2288) states that SMMEs contribute to the economic development of a country through job creation, sustainability and innovation. However, as the most challenging aspect of economic development is to improve the living standards of the economy, Mohr and Fourie (2004:588) indicate that economic growth, in relation to economic development, creates a reduction in inequality and eliminates poverty.

Economic development, and alternatively economic growth, can be achieved through SMMEs (Soontiëns, 2002:710). According to Abor and Quartey (2010:223), SMMEs have the power to create products or services of value to supply to either consumers or other organisations, thereby adding value to the economy's national product. A countries gross domestic product (GDP) is used to measure the level of economic development by adding the value of the complete number of products and services produced within a specified period of time (Mohr & Fourie, 2004:63). SMMEs are seen to contribute, on average, between 51 and 57 percent towards South Africa's GDP (Abor & Quartey, 2010:223; Kongolo, 2010:2288).

Swart (2011:10) emphasises that in many parts of the world, SMMEs are given less recognition than larger organisations receive for their contributions towards the economy. In comparison to larger organisations, smaller organisations highlight the significance of an individual's ideas, and are characterised by following a paternalistic custom, planning in an informal manner, creating knowledge through networking with others and working towards achieving increased levels of economic growth (Geldenhuys & Cilliers, 2012:1).

Entrepreneurship and SOs are clearly essential for economic development (Franks & Johns, 2015:402). In summary, SOs, together with entrepreneurship, assist in developing an entrepreneurial culture, which will lead to lower levels of unemployment, crime and social problems. In turn, this will uplift economic

development and growth in the economy (Ladzani, 2012:23). However, the SO risks failure due to the entrepreneur's lack of essential management skills and knowledge for the effective managing of a SO (Nieuwenhuizen, 2011:364). Therefore, an overview of the general management principles applied to SOs form part of this study.

2.10.3 General management principles in SOs

The management of SOs usually are implemented through the owners of SOs, which indicates that the management structures of SOs are not as formal as the management structures of their larger counterparts (Abor & Quartey, 2010:219; Lussier & Sonfield, 2015:383). Oosthuizen (2011:59) agrees, indicating that the structure of management, referring to the various levels of management (refer to Section 2.4.2), may be relatively flat as the owners of SOs are often the managers too. In such situations, for example, the owner or manager of the SO will undertake the various tasks of top management, middle management and first-level management, whereas larger organisations will have multiple managers in the position of top management, middle management and first-level management.

French *et al*. (2004:766) emphasise that a traditional approach to management suggests that SOs should follow the same management principles and processes as those that larger organisations utilise. However, Moore *et al*. (2008:478) caution that the management structure of SOs differ from those of larger organisations due to the challenges confronting owners/managers of SOs. Perrini *et al*. (2007:286) further differentiate SOs from larger organisations by indicating that SOs generally are independent, multi-tasking, financially restricted, informally structured and possibly personalised. Therefore, given that the SOs management structures differ greatly from larger organisations, SOs should apply the management principles differently, which includes management tasks (Ates *et al*., 2013:29; Cronje *et al*., 2000:498).

Jones (2007:78) states that the management tasks, namely planning, organising, leading and control, are necessary in every organisation, regardless of its size. The management tasks of SOs can be explained as follows:

- **Planning:** The importance of planning is emphasised to ensure success for the operations of the SO. The SO participates in the regular planning activities of an organisation, but the planning may be less than the desired level. The type of

planning conducted by SOs is considered to be based on specific issues that relate, for example, to the amount of inventory to order (Moore *et al*., 2008:482). According to Cronje *et al*. (2000:498), planning in a SO is easier than the planning in larger organisations. The reasons for this are because the SO's environment is smaller and less complicated than larger organisations, there are fewer regulations that SOs should comply to, the marketing environment is simpler to recognise and the planning process is done for a shorter term.

- **Organising:** Organising refers to the allocation of activities, power and responsibilities in the functional areas of the organisation (Kroon, 2008:53). Cronje *et al*. (2000:498) suggest that SOs could rather outsource the activities required from the functional areas in the organisation instead of recruiting people to administer the activities required. For example, the SO could rather utilise the services of external accountants instead of employing a financial manager.
- **Leading:** Managers are required to operate as leaders in order to direct, guide and motivate the employees to achieve the organisational objectives (Oosthuizen, 2011:61). Leaders, and subsequently managers of SOs, should acknowledge that their employees have their own specific objectives to achieve and the leader's task would thus be to manage the employee's behaviour in such a way that it leads to the achievement of the SOs objectives (Cronje *et al*., 2000:499).
- **Controlling:** Managers use controlling activities to ensure that the intended plans are being executed accordingly and if any deviations are to occur, they can be rectified (Moore *et al*., 2008:485). According to Cronje *et al*. (2000:499), the managers of SOs often fail to acknowledge the importance of control in their organisations and as such, fail to implement the controlling activities. However, managers of SOs should realise that control monitors the actions of everyone involved in the operations of the SO in order to make sure that the actions are in accordance with the predetermined plans and objectives set.

The above section has briefly explained the general management principles applied to SOs, with regard to their management processes, management levels and management tasks. The following section gives an overview of the challenges encountered by SOs in South Africa.

2.10.4 Challenges encountered by SOs in South Africa

There is a need to understand the challenges facing SOs in South Africa, a developing country, as these challenges are dissimilar to those experienced by SOs in developed countries (Okpara & Kabongo, 2009:9). Organisational change is witnessed through growth and development, especially with technology advancing at a tremendous pace. These essential changes are often overlooked or ignored as SMMEs are confronted with many issues in the struggle to remain in business (Retief, 2011:14).

Van Eeden *et al*. (2003:13) state that as a result of the problems SMMEs encounter, between 70 and 80 percent of SMMEs in South Africa fail to survive and continue in their organisational operations. According to Ladzani *et al*. (2011:1461), this SMME failure rate still applies, even after 10 years. While South Africa has many successful entrepreneurs (Ladzani, 2013:45), Olawale and Garwe (2010:729) state that the South African SMME failure rate stands at 75 percent, which is one of the highest rates experienced worldwide.

Some of the major issues SMMEs struggle with are an unfavourable legal environment, lack of access to international markets, finance and credit, shortage of multiple organisational skills and access to information, equipment and technology, shortage of affordable business premises, and an ineffective structure to support services (Abor & Quartey, 2010:224; Ladzani, 2012:43; Swart, 2011:10). Van Eeden *et al*. (2003:15) emphasise that there are numerous factors affecting the constraints SMMEs experience concerning finance and credit. These factors include, amongst others, inadequate capital or difficulties in obtaining credit, inaccurate capital estimations and deficient knowledge of bookkeeping, high start-up costs, high operating expenses, and insufficient profits. Luiz (2002:3) adds that without sufficient capital, SMMEs also have issues with investing in assets, such as raw materials, equipment, consumer credit and finished products. Ladzani *et al*. (2011:1463) stress that poor management skills are evident if SMMEs fail within the start-up phase. The shortage of managerial skills leads to a lack in management expertise (Abor & Quartey, 2010:224). According to Van Eeden *et al*. (2003:15), management issues avoiding SMME growth entails a shortage of training, an inability to grow, unrealistic self-evaluations and incorrect views to management.

SMMEs struggle to conquer the problems on their own (Ladzani, 2012:43). In order to overcome some of the issues relating to SMMEs growth and survival, the public and private sectors have developed institutions to offer support or assistance services to these SMMEs, of which an overview is provided in the next section.

2.10.5 Support systems for SOs in South Africa

Government agencies, institutions and certain private sectors in various regions of South Africa have developed programmes that are aimed at supporting SOs (Department of Trade and Industry, 2010:1). Kongolo (2010:2290) stipulates that governments develop policies and systems to support SOs so that the SOs can create employment opportunities and improve the living standards of the economy.

The democratic changes of 1994 in South Africa brought about tremendous changes, one of which was a policy that focused on the development of SOs (Department of Trade and Industry, 2005:3). In 1995, a white paper was developed on the national strategy for the development and promotion of small business in South Africa (South Africa, 1995). The Parliament of South Africa also released a National Small Business Act (102 of 1996). This act was developed in order to assist with the development and support of SOs in South Africa (Swart, 2011:10).

In the light of government awareness on the importance of SMMEs, government funded institutions were put in place. The Department of Trade and Industry was deemed in charge of policy implementations on SMMEs (Department of Trade and Industry, 2014). As an agency to the Department of Trade and Industry, the government developed two institutions or programs in support of SMMEs, namely Khula Enterprise Finance Limited and Small Enterprise Development Agency (Seda). The Khula Enterprise focuses on providing finance to SMMEs, through networks created in the public and private sector financial institutions. In comparison, Seda strives to increase the sustainability and competitiveness of SMMEs (Department of Trade and Industry, 2010:5). Swart (2011:11) articulates that while the Khula Enterprise is focused on providing financial support, the Ntsika Enterprise focuses on providing non-financial assistance to SMMEs, in the form of management development, marketing and business development services. The list of support institutions government offers to SMMEs is inconclusive and includes institutions,

amongst others, such as the Small Enterprise Finance Agency (SEFA), National Empowerment Fund (NEF), Industrial Development Corporation (IDC) and National Youth Development Agency (NYDA) (Department of Trade and Industry, 2014).

While this section only focused on support institutions provided by the public sector, it is also important to note that the private sector is actively involved in assisting SMMEs. In this respect, multiple organisations from the private sector have responded to requests for assisting SMMEs and responded through various initiatives, for example gaining access to finance, providing development services and fostering SMME start-ups (Department of Trade and Industry, 2005:12). Rogerson and Rogerson (2012:60) indicate that it was between 2006 and 2010 that an influx of public and private sector support services were established for the intention of assisting SMMEs in overcoming major obstacles conflicting their development and growth.

The Department of Trade and Industry has developed an Incubation Support Programme (ISP) in an attempt to encourage larger organisations to support smaller organisations and assist in their development and growth (Department of Trade and Industry, 2013:2). Owing to the fact that business incubators are being recognised as successful institutions that are capable of supporting SOs (Seda, 2013/2014:5), a comprehensive analysis of business incubators is provided in Chapter 3.

2.11 CONCLUSION

This chapter has provided essential insights to the field of business management for entrepreneurs. Business management is a dynamic field that constitutes the business environment, general management principles, management functions, entrepreneurship and entrepreneurs. In order to provide entrepreneurs with a complete guide to the management of SOs, as the title of this study indicates, it was necessary to incorporate a discussion on the management of SOs. Section 2.2 introduced business management through its definition, purpose, task and explaining businesses as an organisation. Section 2.3 provided an overview of the business environment by discussing the interaction between a business and its environment and further analysing the internal and external environments that form the business environment. Following from the business environment, Section 2.4 provided a comprehensive

outline of the general management principles applicable to most types of businesses. The general management principles define management and explain the levels of management, management tasks and management skills. As a business is made up of various functions, Section 2.5 examined the management of the major functions found in a business. As a major component to the field of business management, Section 2.6 described entrepreneurship in relation to its definition, importance and types of entrepreneurial organisations. Moreover, as the terms entrepreneurship and entrepreneur are inseparable, this section also defined entrepreneurs and related entrepreneurs to creativity and innovation. Further discussions relating to the field of entrepreneurship were provided through the entrepreneurial process in Section 2.7 and the entrepreneurial business life cycle in Section 2.8. Section 2.9 gave a more comprehensive discussion of the business plan, which was introduced briefly under the entrepreneurial process. The last section of this chapter, Section 2.10, explained SOs as an important topic to the field of this study. The explanations on SOs included its definition, importance and general management principles pertaining to business management. Further insights into SOs were also given through discussions on the challenges encountered by SOs in South Africa and support systems for SOs in South Africa.

In Chapter 3, business incubators are defined, together with the different types of business incubators that can be distinguished. Moreover, emphasis is placed on the services that business incubators provide and the importance of business incubators. The final section of Chapter 3 examines the general marketing practices that are applicable to business incubators.

CHAPTER 3
UNIVERSITY BUSINESS INCUBATORS

3.1 INTRODUCTION

Chapter 2 laid the foundation for the study by highlighting the concepts of business management operations for entrepreneurs of SOs. Chapter 2 revealed that the business management practices, which include management tasks, skills and functions, are essential to enable entrepreneurs of SOs to manage their operations effectively. Given that, there is a myriad of business management skills and knowledge required by the entrepreneurs of SOs in order to achieve business success, this chapter aims at identifying the services UBIs can provide to the entrepreneurs to assist in developing their skills and knowledge for the effective operation of their organisations.

This chapter intends to identify the important variables pertaining to UBIs. Section 3.2 discusses the concept of business incubators, which includes a definition of business incubators, their importance and the various types of business incubators. Section 3.3 provides an overview of the essential business incubator services. Owing to Colbert *et al*. (2010:3) advising that incubators should follow sustainable and efficient organisational operations to ensure optimal success, the relevant marketing practices to guiding marketing strategies and processes for the successful operations of an incubator are discussed in Section 3.4. This section includes a definition of marketing, its management orientations, strategies and the marketing mix. Section 3.5 concludes this chapter.

3.2 BUSINESS INCUBATORS

The South African government has prioritised the promotion of entrepreneurship and SOs (Department of Trade and Industry, 2005:7) as they are able to build a strong economy together (Groenewald *et al*., 2006:2). Entrepreneurship, through the creation of jobs, innovation and its effect on welfare, is considered a key factor in economic development and growth (Herrington *et al*., 2010:57). As a result, the importance of building a strong entrepreneurial focus has been emphasised (Ladzani, 2012:23). However, while SOs are viewed as powerful mechanisms that contribute to economic

development and growth through increasing employment opportunities and wealth (Van Scheers & Radipere, 2007:85), they are confronted with obstacles obscuring their growth potential, and conversely leading to failure (Bezuidenhout & Nenungwi, 2012:11658). Business incubators, which provide support to SOs, have been created to ensure the growth and sustainability of SOs and thus, have lessened the failure rate of SOs. Moreover, South Africa and countries all over the world are beginning to appreciate the value of incubators as successful institutions to support SOs (Seda, 2013/2014:5).

Business incubation provides entrepreneurs with a nurturing, instructive, and supportive environment during the critical stages of starting up a new organisation (Vargas-Hernández & Magaña, 2014:1; Wanklin, 2002:23). Incubators aim to provide incubatees with an extensive incubation programme that provides an array of services that can decrease the incubatee's costs and ultimately increase their chances of success (Hackett & Dilts, 2004:57). The primary goal of incubators is to decrease business start-up failure (Wanklin, 2002:23) by invigorating entrepreneurial activity through providing support to start-up organisations when they are most vulnerable to risks and failure (Grimaldi & Grandi, 2005:112; McAdam & Marlow, 2008:222; Theodorakopoulos *et al*., 2014:1).

Johnsrud *et al*. (2003:16) stress that, within developing and transitional economies, there is an inclination towards the development of incubators for the purpose of creating and reinforcing an entrepreneurial climate. Von Zedtwitz and Grimaldi (2006:459) state that incubators create entrepreneurial climates by combining various technologies, resources, knowledge and expertise. However, Kuratko and Hodgetts (2007:270) opine that within settings where entrepreneurial climates are low or underdeveloped, there is a need for the establishment of entrepreneurial support systems to coordinate organisations, or potential entrepreneurs to gain from business incubation, whereby sheltered environments are created to increase entrepreneurial success. Therefore, incubators may assist entrepreneurs by means of business incubation, in conquering the barriers that stand in their way of developing new organisations and by providing these entrepreneurs with the necessary resources required to establish, grow and maintain start-up organisations (Meru & Struwig, 2011:113).

An incubator is essential to entrepreneurs, as they are aimed at satisfying the voids found within an entrepreneur's abilities (Mutambi *et al*., 2010:199). Incubators contribute to the creation of start-up organisations through motivating entrepreneurs to follow their ideas and establish their own organisations (Mutambi *et al.*, 2010:190). Bøllingtoft and Ulhøi, (2005:269) signify that incubators enforce entrepreneurial talent by providing an entrepreneur with the necessary services and resources needed to enhance their full potential. Peters *et al*. (2004:84) highlight that once an entrepreneur has decided to follow through on an idea and start a new organisation, an incubator can have a significant impact on assisting the entrepreneur in the start-up process by providing the necessary resources and generating rewards.

For the purpose of this study, it is necessary to define what business incubators mean, and to investigate the main elements of this definition. This section provides a concise definition of business incubators, together with the importance of business incubators and an overview on the various types of incubators.

3.2.1 Business incubators defined

The foundation of the word incubator stems from the elementary definition of the word, meaning, "the artificial nurturing of the chicken egg in order to hatch them faster in a sheltered environment" (Mutambi *et al*., 2010:194). Similarly, the hatching concept is applied to organisations, whereby business incubators serve start-up organisations, referred to as fledgling organisations (Harwit, 2002:26) or incubatees, in shortening the time and reducing the costs of establishing and growing the start-up organisation, thereby enhancing their chances of success and survival (Gassmann & Becker, 2006:20; Mutambi *et al*., 2010:194).

A business incubator is seen as an organisation that offers SOs a wide variety of comprehensive and incorporated services with the intention of fostering the procedure of developing victorious SOs through business incubation (Adegbite, 2001:157; Kuratko & Hodgetts, 2007:264). Peña (2004:227) concur stating that an incubator offers an incubation programme that can provide entrepreneurs with specialist services such as the necessary knowledge, skills, networks and resources needed in order to achieve business success. Abduh *et al*. (2007:74) interchangeably define the terms business incubator and business incubation programmes as being an

organisational development tactic that is intended to speed up the procedures start-up organisations are faced with, in terms of formation, development and survivability.

According to Kuratko and Hodgetts (2007:264), typical incubator services include providing small start-up organisations with rental space, shared office services and business consulting support in order to accelerate growth within the early stages of development. Bridge *et al*. (2003:391) concur, indicating that incubation programmes typically are offered within incubator centres, which thereby enables incubatees to co-locate, rent space and distribute a variety of business services and equipment. Moreover, in order for an incubator to be operational and efficient, the requirements needed include staff members who can contribute to a resource network and who can provide start-up organisations with business guidance, shared services in terms of an office administrator, phone, fax and photocopying machine and flexible space that can be adapted as needed. Rice (2001:165) posits that, owing to incubators utilising general facilities to co-locate start-up organisations and incubator staff members, incubators can provide many forms of support to organisations on a daily basis.

The business incubation programme, offered by incubators, aims to carefully select incubatees to form part of the programme, where through the programme, the incubatees are often co-located in the incubators premises and provided with an array of services to increase their chances of success. Once the incubatees have become sustainable and independent organisations, they graduate from the incubation programme, thus heightening their chances of survival in the market (Abduh *et al*., 2007:75). In general, incubatees are expected to graduate from the incubation programme within three years, which in some cases can be extended to five years (Lin *et al*., 2012:2092; Raheem & Akhuemonkhan, 2014:78). Buys and Mbewana (2007:356) signify that the conceptualisation of business incubators rests in the establishment of an entrepreneur's idea; in provisions of leading the entrepreneur's idea from inception to commercialisation. Furthermore, while the incubation programme ensures a protected environment for the incubatee to enact in, it also reduces the risk of turning the entrepreneur's visions into realism. Chandra and Chao (2011:55) concur, indicating that an incubator provides incubatees with a protected environment when growth, associated risk and capital needs outweigh their capability to produce a self-sufficient cash flow for survival.

As defined, business incubators contribute to the development of incubatees' organisations through the provision of support services (Mutambi *et al*., 2010:192). However, a more comprehensive overview on the importance of incubators is necessary to understand the value of business incubation. The following section discusses the importance of business incubators.

3.2.2 Importance of business incubators

Business incubators started receiving attention within the 1980s (Ahmad & Ingle, 2011:628; Hsu *et al*., 2003:80). Frenkel *et al*. (2008:191) concur, indicating that it was within the early 1980s that incubators were launched in Europe due to structural changes and globalisation. Bøllingtoft and Ulhøi (2005:271) articulate that incubators were identified as means for development in the late 1970s and early 1980s, when large manufacturing-based economies began shifting to smaller, technologically and service-based economies. However, through the growth on the topic of incubators, they became an important source to be considered for invigorating regional development and local economic activity (Adegbite, 2001:157; Kuratko & Hodgetts, 2007:270).

According to Lee and Osteryoung (2004:418), business incubation programmes are encouraged by many countries around the world as they are seen as a means to rejuvenate local economies, create employment opportunities and foster high-technology industries. Typically, the majority of incubators are developed in areas that signify economically depressed economies with a high level of failures amongst start-up organisations. In this instance, the incubator would be established to encourage organisational formation and revival (Johnsrud *et al*., 2003:16). Buys and Mbewana (2007:356) denote that a community's economic wellbeing will be improved through the creation of incubators given that incubators aim to increase the accomplishment levels of organisations.

Smit and Watkins (2012:6325) stress that employment opportunities are generated through the creation of new SOs. When incubators are considered as a tool for economic development, the fundamental idea is that more organisations will be opened and there will be a higher percentage of survival rates within these new organisations and those under the incubation programmes (Erlewine & Gerl, 2004:9).

Johnsrud *et al*. (2003:18) reiterate that the objective of incubators encouraging the development of start-up organisations is to make the organisations successful, profitable, achieve substantial growth, reposition within the geographical markets and provide work for a great number of employees. Therefore, incubators are said to affect the development of a local economy positively by means of escalating the level of success achieved by most new organisations (Colbert *et al*., 2010:3).

Generally, new SOs fail to become successful and affluent organisations due to the vulnerability experienced within the infant years subsequent to start-up. This is evident in the South African market, where it has been recorded that 75 percent of SOs fail to become established organisations (Ladzani *et al*., 2011:1461; Neneh & Van Zyl, 2012:8328; Olawale & Garwe, 2010:730). Peña (2004:226) explains that especially start-up organisations have to deal with many barriers to overcome and survive during the first couple of years. Consequently, the failure rate of SOs far exceeds the success rate or expansion rate (Smit & Watkins, 2012:6325). Various authors concur, stating that about 90 percent of new SOs become unsuccessful within their first five years of function due to a deficiency in management proficiency or lack of capital (Bezuidenhout & Nenungwi, 2012:11659; Peña, 2004:226; Peters *et al*., 2004:85). Frenkel *et al*. (2008:191) accentuate that when organisations are placed under an incubation programme, their chances of success are much greater than those organisations that are not operating under an incubation programme. Thus, business incubation has been recognised as an effective means in reducing the number of failures and increasing growth rates amongst new organisations (Mutambi *et al*., 2010:190).

In the initial stages of development, SOs are confronted with numerous challenges, which include inadequate capital requirements, lack of access to financial resources, deficiency in business and managerial skills, lack of technical knowledge, scarce information on market conditions, time pressures, and uncertainty within the organisational surroundings (Abduh *et al*., 2007:75). Incubators are viewed as a vital element in providing new organisations with a structured, centralised and controlled environment, thus leading to cost-savings, timesavings and skills-development (Moore *et al*., 2008:241). Adegbite (2001:158) signifies that organisations can explore the simultaneous satisfaction of receiving financing and support requirements

provided by an incubator, which in turn, can considerably enhance development within the organisation. Bergek and Norrman (2008:21) articulate that through using incubator services SOs will be able to reduce initial capital investment and overhead costs.

One of the greatest benefits released from an incubator is that a possibility is created for incubatees to build relationships with one another, and thus share similar experiences (Todorovic & Suntornpithug, 2008:400). According to Bøllingtoft and Ulhøi (2005:269), incubators are used to combine various resources, skills and services in order to establish a synergy amongst the incubatees. McAdam and Marlow (2008:223) emphasise that an incubator creates an important element for entrepreneurs through the establishment of networks, whereby entrepreneurs will be able to collaborate, share knowledge, discuss mutual struggles, build meaningful contacts, and support one another as they endeavour to survive and be successful.

3.2.3 Types of business incubators

When the main purpose of an incubator is considered, no difference can be found amongst the core principles of the different incubator models established. In other words, the basic practices and purposes of an incubator remains the same, regardless of its type (Abduh *et al*., 2007:75; Ahmad & Ingle, 2011:628; Kuratko & Hodgetts, 2007:265). Scaramuzzi (2002:4) emphasises that different types of incubators may be found for various reasons, such as the incubator's foundation, in terms of for-profit or non-profit purposes, whether their sponsorship is private, public or mixed, and whether the incubator's focus will be for mixed-use purposes or on a specific niche segment. According to Kuratko and Hodgetts (2007:264), the four major types of incubators are known as publicly sponsored incubators, non-profit incubators, UBIs and privately sponsored incubators. As such, the types of incubators discussed in this section concentrate on for-profit and non-profit incubators, private and public sponsored incubators, UBIs, hybrid (mixed) incubators and industry focused incubators.

Gassmann and Becker (2006:20) indicate that a non-profit incubator is not a new phenomenon. These incubators are intended to provide support and assistance to organisations in order to increase local development and other community social

purposes, such as sustainability and the promotion of entrepreneurial activity. Grigorian *et al*. (2010:2) suggest that incubators based on a non-profit basis receive financial support from local or community levels. According to Peters *et al*. (2004:84), non-profit incubators require a small amount, or no equity at all from the services offered to incubatees. According to Johnsrud *et al*. (2003:17), an incubator must ensure a steady flow of income to continue in its operations. This flow of income can stem from various sectors that might include grants from local or state agencies or other support systems, equities or royalties earned from incubatees within the incubation programme, and via rent or other fees charged to incubatees.

In comparison to non-profit incubators, Mutambi *et al*. (2010:199) signify that a for-profit incubator is concerned with assisting incubatees by offering them an array of services, yet these incubatees will be charged at subsidised rates in return for the services received. According to Gassmann and Becker (2006:20), a for-profit incubator is focused on generating financial proceeds for the incubator organisation. These financial proceeds can stem from property development, transfer of innovative technology, and investment opportunities in incubatees (Al-Mubaraki & Busler, 2010:3; Erlewine & Gerl, 2004:75). Peters *et al*. (2004:84) state that it is estimated that a for-profit incubator can take up to 70 percent of the profits incurred by incubatees.

McAdam and Marlow (2008:222) signify that the main differences found between various incubators are related to the way in which they are funded. Frenkel *et al*. (2008:192) advocate that the majority of incubators found are known to be associated with public or private entities, such as the government, universities, research entities and large technological firms. Grigorian *et al*. (2010:2) proclaim that when incubators are sponsored by a public entity they receive reimbursements from national and state-governments. In contrast, privately sponsored incubators do not benefit from these sorts of reimbursements where instead, they operate in a self-subsidised manner.

Owing to the fact that most public incubators were linked with universities, a new form of incubator has developed, namely UBIs (Von Zedtwitz & Grimaldi, 2006:460), which may be sponsored either directly through a university, or obliquely by a university (Grigorian *et al*., 2010:2). Based on the general principles of incubators, Todorovic and Suntornpithug (2008:390) define a UBI, which is

subsidised formally by a university, as a programme that aims to cultivate newly established SOs. Additionally, UBIs intend to develop incubatees by providing a selection of support services. Lee and Osteryoung (2004:418) define UBIs in a general perspective by identifying that it is an innovative system deliberated to support entrepreneurs in the establishment of organisations. Furthermore, UBIs enhance an entrepreneur's potential through enabling linkages within their talents, technology, capital and expertise. Grigorian *et al*. (2010:2) add that one of the core purposes of a UBI lies within the commercialisation of university research and methodical information. A UBI is established by way of creating a channel, whereby academic research with valid output potential can be commercialised or transformed into something of greater value within the industry segments (Ahmad & Ingle, 2011:628; Kuratko & Hodgetts, 2007:265). Bøllingtoft and Ulhøi (2005:271) concur, indicating that UBIs consider development as an end in itself through principally converting research and findings into new products, services or technologies. Similar to other business incubation programmes, university business incubation programmes begin working with organisations prior to the actual development of a product or service, and continue providing these organisations with assistance until they have achieved adequate growth levels and are able to survive without receiving any additional assistance from the UBI (Grimaldi & Grandi, 2001:239). An overview of essential UBI services is important for this study and as such, a discussion of essential UBI services will be provided in Section 3.3.

A hybrid incubator is a combination of any of the above-mentioned incubators, specifically for-profit and non-profit incubators. A hybrid incubator can take on a combination of these incubator models such as a public-private partnership incubator or corporate incubator (Branstad, 2010:294). Von Zedtwitz and Grimaldi (2006:460) stress that with the start of the Internet revolution in the late 1990s, many entrepreneurs sought to endorse profit-oriented private and virtual incubators, which focused on online expertise and services. Moreover, virtual incubators are seen to centre on the future entrepreneur looking to establish in the Internet industry, where the aim would be to produce large profits.

An industry focus, as a market strategy focus, is developed when incubators centre their activities towards an exact industry, such as the information technology industry.

In such situations, the incubatees, currently under the incubation programmes, will be encouraged to adapt their products and services to target a unique market segment (Grigorian *et al*., 2010:10; Schwartz & Hornych, 2008:437). Von Zedtwitz and Grimaldi (2006:461) highlight that a competitive element can be created when incubators take on an industry focus, whereby the benefits of an industry focus is not only realised through the incubator's managers specialised knowledge, capability and competencies, but also through the creation of a synergy between incubatees.

In relation to incubators that follow a market strategy focus, Adegbite (2001:158) distinguishes between two specialised incubators, namely industrial incubators and technology incubators. In this instance, an industrial incubator intends to foster new organisational start-ups and stimulate entrepreneurship among industrial developments, whereby technology incubators endeavour to do the same. However, the focus has shifted from industrial and technological developments to promoting entrepreneurship and innovation among technology-oriented organisations. Von Zedtwitz and Grimaldi (2006:460) differentiate between independent commercial incubators and company-internal incubators, by indicating that the first is mainly associated with individuals who have no links to a parent organisation, whereas the latter often is related to well-built, multinational organisations.

In South Africa, various business incubators are found according to the strategies they persue. Masutha and Rogerson (2014:148) highlight that in 2013, South Africa had a total of 51 business incubators, whereby 42 were owned by the public sector and nine were owned by the private sector. Tambudze (2012) has listed some of the business incubators in South Africa, together with the market strategies they persue. Among these business incubators are The African Rose Enterprise Development, who provide support to emerging oil farmers and agro-processing businesses; Aurik, an incubator that invests and builds small businsses into medium sized businesses and sells them; and Chemin, an incubator which supports the start-up and growth of SMMEs in the downstream chemical industry. Other business incubators were listed as The Downstream Aluminium Centre for Technology, focusing on training, skills development and business incubation of small businesses in the aluminium industry; Egoli Bio that assists entrepreneurial life sciences and biotechnology ventures during their start-up phase; Furntech, who support small businesses in furniture

manufacturing; and The innovation Hub, which is a science and technology park. The list continued to explain Shanduka Black Umbrellas that are involved with developing black businesses; The Nelson Mandela Bay Incubator, which aims to create successful small ICT businesses; Soshanguve Manufacturing Technology Demeonstration Centre, demonstrates small-scale manufacturing machinery and quipment in order to train entrepreneurs in the respective fields; and lastly, The Timbali Technology Incubator, which aims to create a centre for the establishment and support of emerging farmers in the cut flower market. Interestingly, Masutha and Rogerson (2014:149) have found that in South Africa, 84 percent of business incubators follow an industry focused market strategy, with the main inustry sectors being manufacturing, jewellery, alimunum fabrication and stainless steel production. However, in comparison, 16 percent of the business incubators are mixed in relation to the business categories of consumers they serve.

The types of incubators are categorised largely according to their incubation programmes and the services offered by the incubator (Bizotto, 2003:20). However, even though different types of incubators will offer specific services based on the consumers they serve or the community, they will still provide the general services that are relevant to any type of incubator (Grimaldi & Grandi, 2005:111). Therefore, it is necessary to provide an overview on the general services UBIs will provide, together with the specific services based on their type. The following section outlines the essential UBI services.

3.3 ESSENTIAL UNIVERSITY BUSINESS INCUBATOR SERVICES

Incubators offer incubatees a variety of support services due to the fact that these organisations are not in the position to have all the required resources to ensure an optimal level of operation, and thus to achieve successful standards (Abduh *et al*., 2007:75; Kuratko & Hodgetts, 2007:264). Verma (2004:40) concurs, indicating that incubators offer services to incubatees in order to reduce the amount of costs involved in the starting stage of the organisation. It is not the purpose of this study to provide in-depth information on each essential service offered by incubators but simply to provide an understanding of the essential services required from UBIs by incubatees.

The services offered by an incubator can diverge from incubator to incubator and even across the services offered to the incubatees within the incubation programme (Al-Mubaraki & Busler 2010:3; Scott, 2000:85). Colbert *et al*. (2010:72) highlight that the decisions relating to the services offered by the incubator should be based on the market the incubator plans to serve, in terms of servicing the incubatees' needs and the needs of the economy, which can be determined by the local economic development goals established for the particular economy. Grigorian *et al*. (2010:1) argue that incubators should create a balance between the services that are offered and the services that are needed by the incubatees. Moreover, if incubators are able to create this balance, their operations will be effective through providing adequate services that match the needs of the local economy. Bajmócy (2006:6) affirm that when incubatees regard the services received from an incubator as value adding, the incubator will be able to attain sustainability.

Abduh *et al*. (2007:75) state that the general incubator services have been categorised in a number of different ways. These classifications relate to incubator services being divided into tangible and intangible resources (Bøllingtoft & Ulhøi, 2005:270), infrastructure, business support and mediation services (Grigorian *et al*., 2010:5), infrastructure, coaching and networking services (Peters *et al*., 2004:86), facilities, counselling and business assistance, and accessibility to internal or external networks (Abduh *et al*., 2007:76). In addition, researchers have further classified incubator services into shared office services, business assistance and networking services (Mian, 1996:329), business consulting assistance that includes financial consulting assistance, management assistance and shared support service, together with physical and logistical services (Verma, 2004:40), facilities, general business services, professional services and management support (Hsu *et al*., 2003:87). According to Grimaldi and Grandi (2005:112), UBI services consist of two categories, namely general incubator services and specific university-related services. Therefore, in accordance with the prior research, the classification of incubator services, for the purpose of this study, will be physical facilities, general business services, management services, networking and professional services, financial consulting services and university services.

Table 3.1 presents the essential UBI services, as derived from relevant prior research. These services are discussed in more detail in the sections that follow.

Table 3.1: Essential university business incubator services

UBI services	Authors
Construct 1: Physical facilities	
Telephone equipment	Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Computer and network equipment	Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Conference room	Colbert *et al*. (2010); Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004)
Cafeteria	Hsu *et al*. (2003); Kuratko & Hodgetts (2007); McAdam & Marlow (2008)
Affordable space and building facilities	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Peters *et al*. (2004); Von Zedtwitz & Grimaldi (2006)
Office equipment and furniture	Abduh *et al*. (2007); Meru & Struwig (2011); Peters *et al*. (2004); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Physical safety and building security	Erlewine & Gerl (2004); Meru & Struwig (2011); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Audi-visual equipment	Al-Mubaraki *et al*. (2010); Flavel & Kalendra (2008); Hsu *et al*. (2003); Verma (2004)

Table 3.1: Essential university business incubator services (continued…)

UBI services	Authors
Construct 2: General business services	
Receptionist / Secretary	Hsu *et al*. (2003); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Photocopier / Fax machine / Scanner	Erlewine & Gerl (2004); Hsu *et al*. (2003); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Postal and express	Erlewine & Gerl (2004); Kuratko & Hodgetts (2007); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Stock handling / receiving	Kuratko & Hodgetts (2007); Verma (2004)
Clerical / Assistance services	Erlewine & Gerl (2004); Grigorian *et al*. (2010); Moore *et al*. (2008); Verma (2004)
Inventory management	Al-Mubaraki & Busler (2010); Al-Mubaraki & Busler (2011); Al-Mubaraki *et al*. (2013); Hsu *et al*. (2003)
Word processing services / Typing	Erlewine & Gerl (2004); Moore *et al*. (2008); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Construct 3: Management services	
Business plan development	Abduh *et al*. (2007); Grigorian *et al*. (2010); Hsu *et al*. (2003); Peters *et al*. (2004); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Advertising	Colbert *et al*. (2010); Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004)
Research and development	Abduh *et al*. (2007); Bajmócy (2006); Grigorian *et al*. (2010); Somsuk & Laosirihongthong (2014)
Human resources management	Abduh *et al*. (2007); Grigorian *et al*. (2010); Hsu *et al*. (2003); Tötterman & Sten (2005); Verma (2004)
Product or service design and development	Abduh *et al*. (2007); Al-Mubaraki & Busler (2010); Erlewine & Gerl (2004)

Table 3.1: Essential university business incubator services (continued…)

UBI services	Authors
Construct 4: Networking and professional services	
Business networks outside the incubator (strategic partners, other clients , and the like)	Abduh *et al*. (2007); Ahmad & Ingle (2011); Meru & Struwig (2011); McAdam & Marlow (2008)
Business networks between incubator tenants (peer networking, sharing information, experience, problems, and the like)	Abduh *et al*. (2007); Ahmad & Ingle (2011); Meru & Struwig (2011); McAdam & Marlow (2008)
Legal counselling	Frenkel *et al*. (2008); Grigorian *et al*. (2010); Meru & Struwig (2011); Peters *et al*. (2004:83); Verma (2004:125); Von Zedtwitz & Grimaldi (2006:461)
Legal representation	Grigorian *et al*. (2010:8); Meru & Struwig (2011); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Patent and intellectual property management	Abduh *et al*. (2007); Hsu *et al*. (2003); Meru & Struwig (2011); Tötterman & Sten (2005); Verma (2004)
Accounting or bookkeeping	Hsu *et al*. (2003); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Tötterman & Sten (2005); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Marketing management	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Hsu *et al*. (2003); Meru & Struwig (2011); Peters *et al*. (2004)
Construct 5: Financial consulting services	
Financial management	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Hsu *et al*. (2003); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Peters *et al*. (2004); Verma (2004)
Accessing commercial bank loans	Al-Mubaraki & Busler (2010); Colbert *et al*. (2010); Erlewine & Gerl (2004); Somsuk & Laosirihongthong (2014)

Table 3.1: Essential university business incubator services (continued…)

UBI services	Authors
Accessing government grants	Abduh *et al*. (2007); Colbert *et al*. (2010); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Government procurement process	Abduh *et al*. (2007); Al-Mubaraki & Busler (2011); Al-Mubaraki *et al*. (2010); Verma (2004)
Government contract preparation	Flavel & Kalendra (2008); Verma (2004)
Accessing outside capital or equity	Abduh *et al*. (2007); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Business taxes	Al-Mubaraki *et al*. (2010); Kuratko & Hodgetts (2007); Lin *et al*. (2012); Verma (2004)
Equity and debt finance	Colbert *et al*. (2010); Meru & Struwig (2011); Mutambi *et al*. (2010); Verma (2004)
Links to financial resources	Colbert *et al*. (2010); Erlewine & Gerl (2004); Frenkel *et al*. (2008); Moore *et al*. (2008)
Construct 6: University services	
Student employees	Erlewine & Gerl (2004); Grimaldi & Grandi, (2005); Moore *et al*., (2008)
Faculty consultants	Grimaldi & Grandi (2005); Moore *et al*. (2008); Tötterman & Sten (2005)
Library resources	Bajmócy (2006); Colbert *et al*. (2010); Grimaldi & Grandi (2005)
Comprehensive business training and education	Al-Mubaraki & Busler (2010); Colbert *et al*. (2010); Grimaldi & Grandi (2005); Somsuk & Laosirihongthong (2014)
Leadership training and coaching	Abduh *et al*. (2007); Ahmad & Ingle (2011); Colbert *et al*. (2010); Grigorian *et al*. (2010); Somsuk & Laosirihongthong (2014)

The following section describes the UBI service classification as derived from the prior research conducted on the incubator services in Table 3.1.

3.3.1 Physical facilities

Physical facilities include the general services that incubators offer to incubatees for the effective operations of their organisations. These services include telephone equipment, computer and network equipment, conference room facilities, affordable space and building facilities and physical safety and building security, amongst the other general services offered (Abduh *et al*., 2007:76; Hsu *et al*., 2003:87; Mian, 1996:329; Verma, 2004:40). Abduh *et al*. (2007:76) mention that entrepreneurs often ignore these services due to the costs associated with them, whereby Bergek and Norrman (2008:21) and Schwartz and Hornych (2008:437) highlight that incubators aim to provide these services to incubatees on a shared basis, which assists incubatees in reducing their overhead costs.

3.3.2 General business services

General business services encompass an array of shared services that are essential for the day-to-day operations of the incubatees' organisations. The services incubators offered to incubatees range from receptionist or secretarial services, access to a photocopier, fax machine and scanner, postal and express services and inventory management, to state a few only (Flavel & Kalendra, 2008:44; Hsu *et al*., 2003:87). Bruneel *et al*. (2012:111) express that during the early phases of development, incubatees might not have had access these services, such as receptionist services, which is made possible now through the provision of shared incubator services.

3.3.3 Management services

Incubators offer management services to the incubatees in the form of professional guidance, support, counselling and mentoring of management related practices (Abduh *et al*., 2007:76). The services within the management services construct include the assistance with business plan development, advertising, research and development, human resource management and product or service design and development (Hsu *et al*., 2003:87; Mian, 1996:329; Verma, 2004:40).

3.3.4 Networking and professional services

Incubators offer incubatees the opportunity to network by introducing the incubatees

to recognised external networks, such as higher education institutions, organisational contacts, lawyers, accountants, marketing professionals, venture capitalists, and potential investors (Buys & Mbewana, 2007:358). Through the provision of these external networking opportunities, incubators can offer incubatees an array of professional services (Peters *et al*., 2004:86), which include legal counselling, legal representation, patent and intellectual property management, accounting or bookkeeping services and marketing management (Hsu *et al*., 2003:87; Mian, 1996:329; Verma, 2004:40). However, the incubatees also have the potential to develop internal networks with other incubatees through the opportunities offered for informal or formal meetings, whereby they can merge and discuss shared issues possibly relating to general management proficiency or expertise (Colbert *et al*., 2010:106; Erlewine & Gerl, 2004:288).

3.3.5 Financial consulting services

Incubatees are offered financial consulting services by the incubator as a means to acquire the necessary capital for their organisations. The services within the financial consulting services incorporate financial management assistance, accessing commercial bank loans, government contract preparation, accessing outside capital or equity, and assistance with business taxes, amongst others (Mian, 1996:329; Verma, 2004:40).

3.3.6 University services

Specifically relating to UBIs, incubatees are offered additional services as opposed to the general incubator services due to the context specific environment of a UBI being linked to university related services. These additional services relate to student employees, faculty consultants, library resources, comprehensive business training and education opportunities and leadership training and coaching (Erlewine & Gerl, 2004:215; Grimaldi & Grandi, 2005:112; Mian, 1996:327).

Business incubators, irrespective of the type, should be considered as an organisation. In taking an organisational approach, the general activities of an organisation should be administered to make the incubator a success. Of these organisational activities, the marketing of an incubator should be considered to be of vital importance. The

incubator's products and services must be marketed to portray a professional image and attract potential consumers, stakeholders, universities and funding sources. An amateur image can be displayed easily if the incubator fails to administer proper marketing activities (Erlewine & Gerl, 2004:141). Incubator management should ensure that their operations are visible to the community and potential stakeholders in order to promote public awareness, through which funding and commitment to the incubator practices will be created. Therefore, an incubator's success lies in its ability to market the incubation programme and incubator services effectively to attract potential entrepreneurs and to establish the networks required for providing the incubatees with the necessary resources and expertise (Colbert *et al*., 2010:15). In light of this, the following section highlights the critical elements of marketing that are applied to organisations, and as such should be applied to incubators.

3.4 MARKETING UNIVERSITY BUSINESS INCUBATORS

Over the past decade, the organisational environment has experienced dramatic changes that resulted from increasing competition, economic fluctuations, political changes, and the heightening need to be aware of activities in the general environment surrounding the organisation. Through all these changes, organisations have realised the importance and need for marketing (Rudansky-Kloppers & Strydom, 2011:301). Erlewine and Gerl (2004:146) highlight that marketing serves two major purposes for an incubator. First, marketing creates awareness for the incubator and secondly, through the incubator staff marketing the incubator's practices and services, they can develop the expertise required to advise the incubatees on the marketing practices they should undertake in their organisations. Cant and Van Heerden (2013:2) emphasise that marketing is important for organisations as it contributes to the accomplishment of organisational objectives such as survival, profitability and growth.

According to Grewal and Levy (2008:5), marketing aims to satisfy consumer needs and wants. Cant and Van Heerden (2013:4) concur, indicating that marketing can be defined as a process that effectively satisfies consumers' needs and wants by providing the right product or service, at the right price and time, and by using the right communication channels. The American Marketing Association (2013) defines the term marketing as, "marketing is the activity, set of institutions, and processes for

creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large". Lamb *et al*. (2010:5) have simplified this meaning by stating that marketing foresees and satisfies consumers' needs in a more efficient and effective manner than competitors, while also generating profits.

From the key elements identified in the definitions of marketing, Kotler and Armstrong (2008:5) define marketing as a process that creates value for consumers and builds consumer relationships, whereby organisations, in turn, reap value from consumers in the form of sales, profits and consumer equity. To provide further insight, the marketing process is illustrated in Figure 3.1.

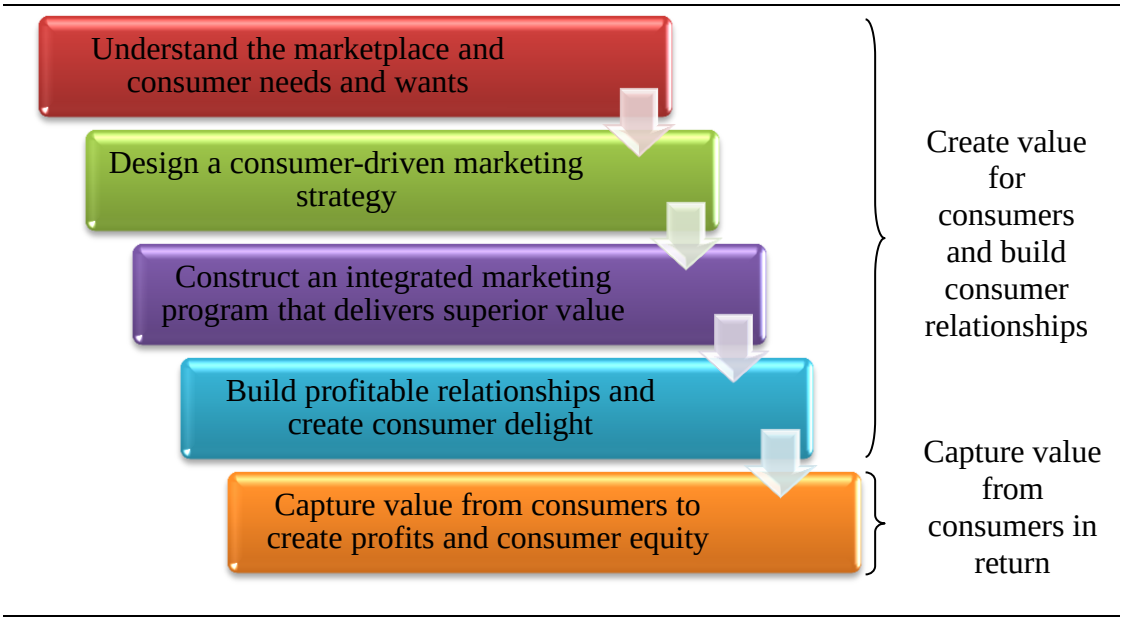


Figure 3.1 The marketing process (Kotler & Armstrong, 2008:5)

Marketing can be considered from two perspectives, first, as a philosophy, attitude or management-orientation that emphasises the importance of consumer relationships and second, marketing entails a set of activities used to implement the philosophy (Cant & Van Heerden, 2013:3). The following sub-sections on marketing centre on the marketing management orientations, marketing strategy and marketing mix.

3.4.1 Marketing management orientations

Marketing has evolved over the years. This has led to the creation of various marketing approaches and reorientations of management thinking (Cant & Van

Heerden, 2013:9). The various marketing orientations, referred to as concepts, are known as the production, product, sales/selling and marketing concepts (Cant & Van Heerden, 2013:10; Grewal & Levy, 2008:14; Kotler & Armstrong, 2008:9; Lamb *et al*., 2010:10; Mostert & Du Plessis, 2007:11; Rudansky-Kloppers & Strydom, 2011:304;). These concepts can be explained as follows:

- **Production concept:** The production concept began in the eighteenth and nineteenth century because of the Industrial Revolution (Mostert & Du Plessis, 2007:11). Lamb *et al*. (2010:10) state that the production concept disregards the consumer's needs and wants and instead concentrates on the production and manufacturing capabilities of the organisation. Kotler and Armstrong (2008:9) add that organisations believe that the consumers will prefer their products and services if they are available at affordable prices, thus with an increased production efficiency.
- **Product concept:** Following on the production concept, which concentrated on improving production facilities, a shift to a product concept took place, which focuses on increasing product features and quality (Lamb *et al*., 2010:11). According to Mostert and Du Plessis (2007:12), the production concept created a competitive base that caused organisations to start focusing on the quality of their outputs, over the quantity.
- **Sales/selling concept:** The sales concept followed a principle of increasing sales by persuading consumers to purchase as many products and services as possible, thus ignoring consumers' needs and wants. This concept was highly characterised by unfair, unethical and dishonest sales practices due to the nature of enforcing sales upon consumers through misleading advertisements and aggressive sales techniques (Rudansky-Kloppers & Strydom, 2011:304). Mostert and Du Plessis (2007:12) concur, indicating that the objectives underlying this concept were to sell what was produced and not to produce what the consumers desired.
- **Marketing concept:** The marketing concept concentrates on developing an understanding of consumers' needs and wants in order to deliver a product or service that will delight the consumers, better than what competitors will. Conversely, this will also lead to the satisfaction of organisational goals and objectives (Kotler & Armstrong, 2008:10). The marketing concept, following on

the sales/selling concept, places greater importance on the quality and packaging of products, distribution channels and marketing communication methods, together with the selling techniques used and the price of the product (Cant & Van Heerden, 2013:11). Rudansky-Kloppers and Strydom (2011:304) highlights that the marketing concept pursues an ethical code of practice, unlike the sales/selling concept.

The marketing concept is based on four principles, namely consumer orientation, profit orientation, social responsibility and organisational integration (Cant & Van Heerden, 2013:12; Rudansky-Kloppers & Strydom, 2011:305). A brief description of these principles can be noted as follows:

- **Consumer orientation:** The consumer orientation is emphasised as the most important orientation of the marketing concept. This orientation utilises marketing activities that aim to satisfy consumer's needs, wants, preferences and demands (Mostert & Du Plessis, 2007:14). Organisations that follow a consumer orientation view the consumer as king or queen and conduct extensive research to determine the consumer's needs, provide outstanding service and after-sales service, together with follow-up research to determine whether the consumer is satisfied (Rudansky-Kloppers & Strydom, 2011:305).
- **Profit orientation:** The profit orientation focuses on increasing the organisation's profits through providing products and services that satisfy consumer's needs. This will also create a loyal consumer base that will not only assist in increasing short-term profits, but also long-term profits (Cant & Van Heerden, 2013:13).
- **Social responsibility:** This principle implies that organisations should be responsible to society and contribute to the wellbeing and state of the community (Rudansky-Kloppers & Strydom, 2011:305). Mostert and Du Plessis (2007:15) differentiate between internal and external social responsibility, whereby internal social responsibility implies that organisations should take care of their staff members through providing a comfortable environment for the staff members to work in. Adversely, the external social responsibility refers to the consumers, general public and government that the organisation should contribute towards, in terms of being ethical to the community it operates in and adhering to rules, regulations and acts.

- **Organisational integration:** An organisational integration approach implies that all the departments, functions, employees and activities conducted in the organisational environment should be synchronised to focus on satisfying consumer needs and demands. By doing so, the overall organisational objective of maximising profits will also be achieved (Cant & Van Heerden, 2013:13).

The above section has provided insights to the marketing orientation, with specific indications to the production, product, sales/selling and marketing concepts. Kotler and Armstrong (2008:9) emphasise that the various marketing orientations, referred to as marketing philosophies, are necessary to guide marketing strategies. The subsequent section describes the marketing strategies applicable to marketing management.

3.4.2 Marketing strategy

Marketing strategy forms part of the internal marketing environment, which means that the elements of marketing strategy are controllable (Mostert & Du Plessis, 2007:32). Marketing strategies are developed to take advantage of marketing opportunities that prevail. The formulation of a marketing strategy entails the development of an objective. However, to achieve the objective of the marketing strategy the target market, competitive advantage, positioning and marketing mix elements need to be developed and described (Lamb *et al*., 2010:29).

Walker and Mullins (2011:6) suggest that the major elements of a well-defined strategy are known as the scope or mission, goals and objectives, resource deployments, identification of a sustainable competitive advantage and synergy. Similarly, Cant and Van Heerden (2013:36) highlight that the elements of a marketing strategy include the mission statement of the organisation, marketing objectives, target market selection and the resources of the organisation. For the purpose of this study, the core elements of a marketing strategy are identified as the mission statement of the organisation, marketing objectives, target market selection and resource deployment. These elements can be explained as follows:

- **Mission statement of the organisation:** A mission statement is used to distinguish the operations of the organisation from similar types of organisations

in the market. A well-defined mission statement will explain the purpose of the organisation by providing the organisation's basic scope (Rudansky-Kloppers, 2011:79). Booysen and Visser (2012:52) concur, indicating that the mission statement of an organisation gives a precise definition of the type of organisation and explains the reasons for the organisation's existence. Cant and Van Heerden (2013:36) highlight that the mission statement is useful as it explains what products or services are offered by the organisation, the markets the organisation serves and acts as a guideline as to where the scarce resources of the organisation should be allocated. Rudansky-Kloppers (2011:82) indicates that the mission statement guides the establishment of all other goals, objectives and plans in the organisation. Colbert *et al*. (2010:5) highlight that the development of an incubator's mission statement is important as it serves as a base to explain the purpose of the incubator and directs the practices and development of the incubation programme.

- **Marketing objectives:** Marketing objectives are linked directly to the objectives of the organisation (Cant & Van Heerden, 2013:39). Mostert and Du Plessis (2007:32) differentiate between goals and objectives by suggesting that goals, with a long-term period, assist in achieving the organisation's mission. Alternatively, objectives aim to attain the goals set, but on a short-term basis. Booysen and Visser (2012:52) state that goals are developed for the entire organisation to work towards, whereas an individual or department within the organisation sets objectives. Colbert *et al*. (2010:8) indicate that an incubator's goals and objectives will be determined to achieve the incubator's mission, which will be developed in the strategic planning process.

- **Target market selection:** In order to support the mission statement of the organisation and the marketing objectives, a target market needs to be selected. The target market should be large enough to fulfil the obligations stated in the objectives and provide survival, growth and profitability opportunities for the organisation (Cant & Van Heerden, 2013:39). Market segmentation needs to take place before an appropriate target market can be selected. Market segmentation can be defined as a process that separates the individuals in the market, who are also potential buyers, into dissimilar groups. These individuals are grouped according to specific features, for example their needs, characteristics or

behaviour (Kotler & Armstrong, 2008:48). Once the individuals have been divided into separate, homogenous groups, marketing management has to decide which groups the organisation should specifically concentrate on serving by keeping in mind the objectives and resources of the organisation. This process is known as target market selection (Rudansky-Kloppers & Strydom, 2011:318). Erlewine and Gerl (2004:148) highlights that incubator's should determine the needs of the target market in order to align their activities to satisfying the needs of the chosen target market and alternatively, reach the incubator's objectives.

- **Resource deployment:** When constructing a marketing strategy, it is important to consider the resources of the organisation, as the limited resources should be allocated to the various sections of the organisation, product-markets and functional departments, while developing the strategy (Walker & Mullins, 2011:6).

Once the marketing strategy has been developed, through the elements of the mission statement, marketing objectives, target market selection and resource deployment, it is important that marketers develop an integrated marketing mix to satisfy the needs of the selected target market/s (Cant & Van Heerden, 2013:40; Kotler & Armstrong, 2008:47; Lamb *et al*., 2010:28; Van Rensburg, 2008:137; Walker & Mullins, 2011:10). The following section, as a continuation to the marketing strategy, explains the marketing mix.

3.4.3 Marketing mix

A marketing mix is a set of controllable elements, namely product, price, place and promotion that an organisation integrates to get the demand from the selected target market/s and thus a reaction from the target market/s (Kotler & Armstrong, 2008:50). Walker and Mullins (2011:10) highlight that the marketing mix elements assist in creating a competitive advantage for the organisation as they centre on developing a product tailored to the specific needs of consumers in the selected target market. Cant and Van Heerden (2013:40) advise that the manner in which the elements of a marketing mix are joined determines whether the consumer will purchase the offering or not. Therefore, the organisation should concentrate on providing the right product, at the right place, at the right time and through the correct promotion techniques

utilised for reaching the target market/s.

Traditionally, the marketing mix consisted of four elements, also referred to as the 4Ps, namely product, price, place and promotion. However, an extended marketing mix has come into practice to cater for the services market. The extended marketing mix includes three additional elements (7Ps), namely people, processes and physical evidence (Cant & Van Heerden, 2013:489; Jooste *et al*., 2008:356; Ladzani, 2012:246; Mostert & Du Plessis, 2007:18). The marketing mix, together with the extended marketing mix, can be explained as follows:

- **Product:** The product refers to the blend of goods and services that the organisation has to offer to the target market/s (Kotler & Armstrong, 2008:50). Grewal and Levy (2008:7) add that the major purpose of the organisation should be to provide value to the consumers in order to satisfy their needs.
- **Price:** The consumers will be willing to exchange a price value for an offering that will satisfy their needs and wants. The price that the consumer is willing to pay will be dependent on whether the consumer will benefit from the offering and whether the offering has value to the consumer (Ladzani, 2012:250). Cant and Van Heerden (2013:40) add that the quality of the offering should also be considered in terms of the quality versus price that competitors are offering. Erlewine and Gerl (2004:149) advise that the pricing structures of incubator's programmes are often restricted as the local market influences the prices charged.
- **Place:** The place element refers to the distribution and logistical activities the organisation should undertake in order to make the product available to the consumers (Mostert & Du Plessis, 2007:18). Place also refers to the availability of the product or service, in terms of when and where the consumers want them (Lamb *et al*., 2010:455).
- **Promotion:** Promotion, also known as marketing communication, entails all the various marketing communication tools utilised to inform, remind or persuade consumers of the organisations offering (Jooste *et al*., 2008:356). Ladzani (2012:256) suggest that the most popular marketing communication tools are advertising, sales promotion, personal selling and publicity. Erlewine and Gerl (2004:149) state that in some cases, the incubator's budgets may restrict the

possibility of pursuing extensive advertising. However, with the limited resources, incubator managers should still aim to provide some form of advertising.

- **People:** People, who are either directly or indirectly involved in the delivery of a service, affect the service delivery experience (Jooste *et al*., 2008:357). Cant and Van Heerden (2013:489) emphasise that an organisation is reliant on people, such as knowledgeable employees and managers, to create and deliver meaningful value in their transactions with the consumers, as consumers easily develop perceptions based on their interactions during the delivery process. Ladzani (2012:258) concur, indicating that it is extremely important that the employees of an organisation have the required interpersonal skills, attitude, appearance and knowledge to deliver the service that the consumers are paying for.
- **Processes:** The processes system refers to all the activities, actions, procedures, programs, tasks, schedules and routines required to deliver the product or service to the consumer in a satisfactory manner (Mostert & Du Plessis, 2007:19). Jooste *et al*. (2008:357) state that consumers will be delighted if they receive a service that is orderly, quick, consistent, organised and convenient to them, over a service that is disordered, slow, inconsistent, disorganised and inconvenient. Therefore, the organisation should ensure that the service or product processes are designed to ensure optimal efficiency and effectiveness.
- **Physical evidence:** Physical evidence is something of a tangible nature that the consumer can actually see and touch of the intangible service process, thus providing support to the service delivery process (Ladzani, 2012:258). Cant and Van Heerden (2013:497) provide examples of physical evidence that would be present in a service organisation. These examples include the physical facility or the building of the organisation, notice boards, equipment and machinery, brochures, letterheads, business cards, billing statements or anything else of a tangible nature in the service organisation's environment.

The above section has concentrated on providing an overview of the marketing activities most relevant to a business incubator. The term marketing was defined, a brief outline of the marketing process was given, followed by discussions on the various marketing management orientations, marketing strategy and marketing mix.

3.5 CONCLUSION

This chapter has provided a literature overview on two essential topics that contribute directly to the main topic of this research study, namely business incubators and marketing. Business incubators, which comprise various types, including UBIs, are deemed as a vital element to the success of SOs. However, to be effective, incubators should market their programmes and services to the SOs. Section 3.2 introduced the topic of business incubators, which included defining business incubators, the importance of business incubators and the types of incubators. Section 3.3 provided an overview on the essential business incubator services, which included discussions on the categorisation of incubator services utilised for this study. The final section of this chapter, Section 3.4 briefly reviewed the marketing practices necessary to guide strategies and processes for the success of an incubator. The marketing section consisted of discussions pertaining to the marketing management orientations, marketing strategy, and the marketing mix.

The following chapter, Chapter 4, analyses the research methodology required for the purposes of this study. The topics covered in this chapter include the research design, research approach, sampling strategy, data collection method, pretesting of the questionnaire, preliminary data analysis and statistical analysis relevant to the objectives formulated in Chapter 1.

CHAPTER 4
RESEARCH METHODOLOGY

4.1 INTRODUCTION

Marketing research is an analytical and objective process used to assist managers or marketers in recognising problems or opportunities. Once the problem is identified, information is gathered, analysed and distributed in order to either solve the problem or support the opportunity (Malhotra, 2010:39). The previous literature chapters focused on providing a literature review on various aspects of business management functions and business incubators, which form part of the broad spectrum of entrepreneurship and marketing, thereby laying the foundation for the research instrument and the research methodology. Chapter 2 specifically highlighted the literature on business management functions in organisations, entrepreneurship and SOs, which laid the foundation for the development of the research instrument utilised in this study. Chapter 3 based discussions on the literature for business incubators, UBIs and marketing. Chapter 3 not only provides concise discussions that contribute to the main topic of the study, but will also assist in the development of marketing strategies and procedures. Through analysing the empirical portion of this study, this chapter focuses on discussing the research methodology employed in this study.

As indicated in Chapter 1, the primary objective of this study was to determine the essential incubator services that SSOs require from a UBI in order to guide the formation of policy objectives, marketing strategies and marketing procedures. This primary objective was deconstructed into six empirical objectives (refer to Section 1.3.3), which dictated the collection of the following required data:

- Determine the perceived importance ranking of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services and university services) amongst SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.

- Determine whether there is a difference regarding the owners/managers' perceived importance of UBI services required between SSOs that have been in operation for five years or less and those that have been in operation for more than six years.
- Determine whether there is a difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceptions towards the importance of UBI services required.
- Determine at what phase of the business life cycle, namely pre-start-up, start-up, growth or maturity, the SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors perceive the UBI services to be important.
- Determine the SSO owners/managers' perceived value of UBI services amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.
- Formulate participant groups based on agreement of the perceived importance of services required from a UBI amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.

The six business incubator service constructs utilised in this study, as developed in Chapter 3, include physical facilities, general business services, management services, networking and professional services, financial consulting services and university services.

This chapter focuses on gathering the necessary information on the research methodology employed for the empirical portion of this study, which is divided into nine sections. The research design and approach is discussed in Section 4.2 and 4.3, respectively. The sampling procedure is introduced in Section 4.4 with specific attention relating to defining the target population, identifying a sampling frame, selecting a sampling method and determining the sample size. Section 4.4 leads the way for the data collection method emphasised in Section 4.5. This section looks at the questionnaire design, question format and questionnaire layout, followed by pre-

testing the questionnaire, Section 4.6, administering the questionnaire, Section 4.7 and preliminary data analysis, Section 4.8. The last section of this chapter, Section 4.9, analyses the statistics to be used on the main study, namely reliability, validity, descriptive analysis, correlation analysis significance testing and lastly, cluster analysis.

4.2 RESEARCH DESIGN

A well-structured plan, namely a research design, is required in order to address the research objectives and hypotheses (Wiid & Diggines, 2013:54). Hair *et al*. (2008:32) note that the research objectives and information requirements guide the researcher on what type of research design to use. Three types of marketing research designs can be distinguished, namely exploratory research, descriptive research and casual research (Cant *et al*., 2005:29). These three designs can be described as follows:

- Exploratory research, which follows an unstructured and qualitative approach, is used in quest for determining the nature of a problem (Berndt & Petzer, 2011:32; Cant *et al*., 2005:30).
- Descriptive research is primarily involved with establishing a correlation between two variables, or identifies the frequency with which something takes place (Iacobucci & Churchill, 2010:59). Malhotra (2010:106) highlights that descriptive research includes preplanning and requires a great deal of structure. The researcher identifies sources of information and gathers data from the sources. This approach generally consists of large sample sizes.
- Casual research involves the collection of data for the principle purpose of analysing cause-and-effect relationships established among multiple variables (Hair *et al*., 2008:33).

Hair *et al*. (2008:104) emphasise that a descriptive research design should be considered when the research objectives comprise answering questions of who, what, where, when, and how for specific groups or marketing related strategies. Moreover, this approach would be deemed appropriate for establishing relationships between variables and for determining differences between various groups. As such, this study followed a descriptive research design in an endeavour to uncover the important

incubator services that SSOs required from a university UBI. A descriptive research design can further be divided into single cross-sectional designs, multiple cross-sectional designs or longitudinal designs. As advised by Malhotra (2010:108), a descriptive research design with a single cross-sectional approach was adopted in this study, as the information was obtained from only one sample of participants only once. The subsequent section describes the research approach utilised in this study.

4.3 RESEARCH APPROACH

Qualitative research and quantitative research are identified as the two basic approaches that can be used in a research study (Kolb, 2008:28). According to Hair *et al*. (2008:81), quantitative research is commonly associated with descriptive and casual research designs, whereas qualitative research is associated with exploratory research designs. Zikmund and Babin (2013:99) state that quantitative research consists of large sample groups, whereas qualitative research adopts a smaller group of participants. Moreover, a qualitative research design analyses the participants in order to gain deeper insights and details to thoughts, feelings and so forth. In comparison, quantitative research, which involves numerical measurement and statistical analysis, is designed to gather data that may easily be projected to the entire population, without having to analyse the participants.

A quantitative research approach was undertaken within this study. The questionnaire utilised in this study included a 41-item scale, measuring the important incubator services that SSOs require from a UBI, which was developed from the literature underlying the subject. The following section describes the sampling procedure used in this study.

4.4 SAMPLING PROCEDURE

Sampling is the process of drawing conclusions from an entire population by identifying a set of elements or objects that have the specific characteristics or information required for the marketing research problem (Zikmund & Babin, 2013:312). Malhotra (2010:370) differentiates between a population, census and sample. A population consists of the entire set of elements that constitute the principles of the marketing research problem. In the case of a census, all the elements

within the population are specified. In comparison, a sample only utilises a specific portion of the elements within the population chosen for contribution to the research study. Iacobucci and Churchill (2010:282) state that when compared to a sample, a census can be very expensive and time consuming, it is occasionally impracticable to obtain a census, and the information obtained from a census may be inaccurate.

A sampling strategy is developed to ensure that the data gathered represent a portion of the entire population examined. As such, the sampling strategy can be seen as a blueprint (Hair *et al*., 2008:139). The process of developing a sampling strategy consists of defining the target population, identifying a sampling frame, selecting a sampling method and determining the sample size. A discussion on the sampling procedure followed in this research study follows.

4.4.1 Defining the target population

In order to define the target population, a specific focus area needs to be selected, whether that is individuals, households, organisations or any other units. The units to be excluded should also be identified, which may include only gaining information from females within the target population or limiting the sample to a particular geographical context (Iacobucci & Churchill, 2010:283). Zikmund and Babin (2013:315) warn that an accurate definition of the target population is essential, as an inaccurate definition can provide misleading or unusable information, which will have a negative effect on solving the research problem.

The target population chosen in this study consists of South African SSOs. The target population may be defined as any individual currently owning a SSO within the country, or any individual managing a SSO. Therefore, SOs form the specific focus area of the target population, with a limitation to the service industry.

4.4.2 Sampling frame

A sampling frame consists of a list of all the suitable sampling elements under the target population selected. The list should contain all the necessary details on the potential elements, as the researcher will need to gather the required information from them (Iacobucci & Churchill, 2010:284). Hair *et al*. (2008:140) state that there is a variety of different sources to use when creating a sampling frame list, such as a

telephone directory, mailing lists and geographical maps. However, the list should be complete in order to prevent drawing an unrepresentative sample. Therefore, the sampling frame for this study comprised a list of SSOs situated in the Vaal Triangle, as obtained from the Vaal Triangle Info Business Directory (Vaal Triangle Info, 2005). Whilst there are various new organisations being established in the Vaal Triangle, together with existing organisations relocating or ending their operations, the Vaal Triangle Info Business Directory is deemed as one of the most comprehensive lists in South Africa. The website has the highest number of visits and hits in comparison to any other website in the Vaal Triangle region. As such, a decision was undertaken to use the Vaal Triangle Info Business Directory (Vaal Triangle Info, 2005) for the sampling frame of this study. In order to make the study more manageable and for reducing time and cost, it was decided to only include the SSOs situated within the Vaal Triangle region. The Vaal Triangle region is home to nearly a million people and within the latter half of the twentieth century has become known as the industrial hub of South Africa (Vaal Triangle Info, 2005); therefore, it was chosen for this study. One group of participants were selected, namely owners/managers of SSOs. The SSOs were selected based on judgement sampling from the service industry sectors, namely auto, estate and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.

4.4.3 Sampling method

The sampling method is the approach used when selecting how a particular sample will be drawn from the target population (Cant *et al*., 2005:165). There are a variety of variables to consider when deciding on a sampling method, which may include the research objectives, accuracy, resources, time, knowledge, scope, and statistical analysis techniques (Hair *et al*., 2008:140). Zikmund and Babin (2013:322) suggest that sampling methods can be grouped, amongst others, under probability sampling or non-probability sampling. Probability sampling is a sampling method based on a random selection concept where every element within the selected target population has a known, nonzero chance of being chosen. In contrast, the non-probability sampling method indicates, in a non-random approach, that certain elements from the target population have been chosen. Probability and non-probability sampling consist

of different sampling methods, as presented in Figure 4.1.

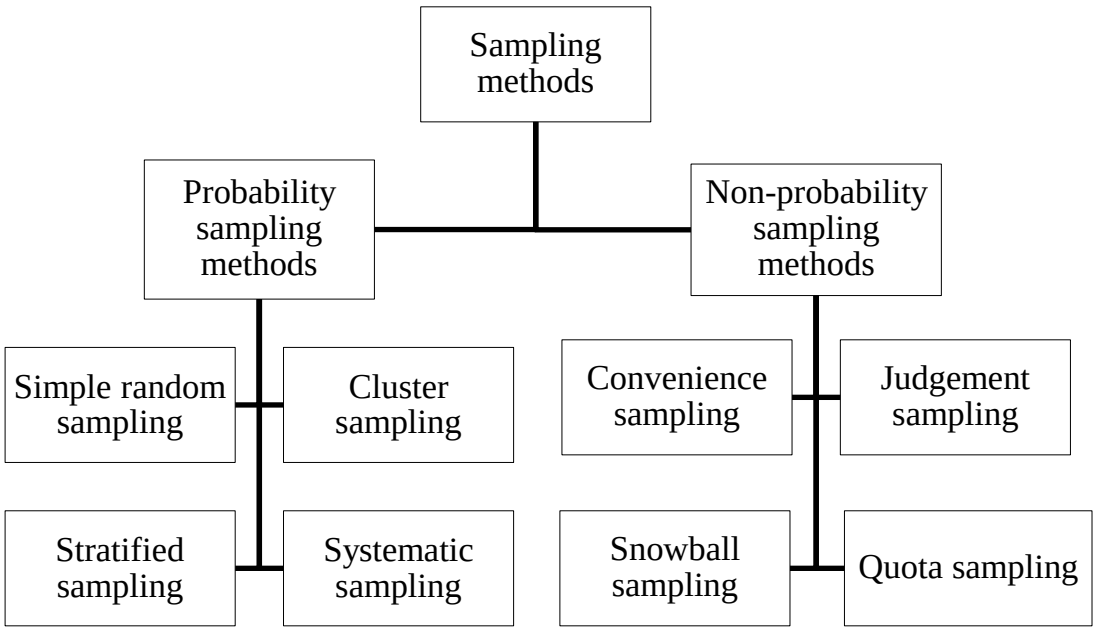


Figure 4.1 Sampling methods (Widd & Diggines, 2013:189)

There are four different probability-sampling methods, which constitute simple random sampling, cluster sampling, stratified sampling and systematic sampling. Cant *et al*. (2005:168) state that with the simple random sampling method, each element is selected separately and at random, whereby every element in the population has a known and equal possibility of being chosen. The cluster sampling method utilises simple random sampling; however, the population elements are placed into mutually exclusive and collectively exhaustive subpopulations (clusters) prior to being chosen separately (Hair *et al*., 2008:135). According to Berndt and Petzer (2011:175), the stratified sampling method takes place in two steps. The first step entails separating the heterogeneous population into mutually exclusive and comprehensive homogeneous strata. Hereafter, the random sampling of elements can be chosen via simple random sampling or systematic sampling. The systematic sampling method presents a complete list of the entire population elements and the sample is drawn systematically from this list (Widd & Diggines, 2013:195).

There are four different types of non-probability sampling methods, namely convenience sampling, judgement sampling, quota sampling and snowball sampling. Convenience sampling is a sampling method whereby the researcher selects and

employs any available and willing individuals as participants (Kolb, 2008:110). In comparison, the judgement sampling method entails the deliberate and subjective selection of individuals (Berndt & Petzer, 2011:174). Within judgement sampling, the researcher's expert judgement is used as an advantage of selecting the most appropriate participants required for the sample (Cant *et al*., 2005:166; Malhotra, 2010:379; Swanepoel *et al*., 2006:21). According to Kolb (2008:111), the snowball sampling method involves the researcher identifying specific participants that match the predetermined criteria. The specific participants are thus utilised within the sampling method but are also requested to identify additional possible participants with specific characteristics for possible participation in the research. Hair *et al*. (2008:136) position that with the quota sampling method the prospective participants are selected according to a set of predetermined criteria, which may involve demographic characteristics, specific attitudes or behaviours.

The sampling method used for this study was a non-probability judgement sample of owners/managers of SSOs in the service industry sectors, namely auto, estate and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors in the Vaal Triangle region.

4.4.4 Sample size

According to Malhotra (2010:374), the number of elements that will be included in the research study, chosen from the target population, is known as the sample size. Iacobucci and Churchill (2010:312) elaborate that the determination of a sample size is complex, and therefore, the type of sample, statistic in question, homogeneity of the target population, including the available resources such as time and money, should be considered when developing the sample size.

A sample size of 125 SSOs was selected for this study. This sample size is in the range of other studies of a similar nature such as Abduh *et al*. (2007:79) (sample size of 129), Meru and Struwig (2011:112) (sample size of 124), Peña (2004:223) (sample size of 114) and Scott (2000:99) (sample size of 118), and therefore, was deemed sufficiently large. An attempt was made to split the sample size of 125 SSOs representatively across the different service industry sectors, namely auto, estate and property management, health care and beauty, hospitality and accommodation, and

professional service industry sectors (25 per industry).

The above section has given insights to the sampling procedure utilised within this study. However, the method of data collection also has an effect on the sampling strategy. Therefore, a discussion on the data collection method follows.

4.5 DATA COLLECTION METHOD

Data collection involves the gathering of primary data by utilising various methods, depending on the data to be collected (Malhotra, 2010:434). The decision of which data collection method to utilise emanates from the problem statement, research objectives and data requirements developed (Hair *et al*., 2008:140). The two main methods for obtaining quantitative data are the observation method and the survey method (Malhotra, 2010:209). Zikmund and Babin (2013:190) state that the observation method involves the systematic gathering of actual behavioural patterns without actual communication or physical contact between the observed participant and the researcher. Instead, this method is conducted by monitoring and recording the behaviours or patterns of the participants, or even objects and occurrences. Kolb (2008:163) emphasises that when using the observation method, the participant's actions are more meaningful than their words or opinions.

The survey method entails the gathering of information from a large population of participants using a structured questionnaire (Malhotra, 2010:183). Wiid and Diggines (2013:110) concur stating that this method is used for collecting data from participants either in a verbal or written format by means of a research instrument in the form of a questionnaire. Berndt and Petzer (2011:134) add that the survey approach can be used to gain specific information for a research project. A major advantage of using the survey method is that the researcher has the ability to design a questionnaire tailored to meet the exact requirements of the research objectives. According to Cant *et al*. (2005:89), the survey method may be used, amongst others, to identify characteristics of target markets, measure consumers' attitudes or for describing purchasing patterns. The survey approach is the most preferred method of primary data collection due to this method being a fast, efficient and precise means to collect the information required from the population or research objects. Kolb (2008:29) postulates that the survey method can be administered through different

methods such as personal interviews, telephone surveys, mail surveys or online interviews. The drop-off survey, often referred to as the drop and collect method, is an additional survey method (Hair *et al*., 2008:107). This approach involves the physical dropping off the questionnaire at the participants' location and collecting the completed questionnaire at the time agreed upon (Zikmund & Babin, 2013:176). Hair *et al*. (2008:112) emphasise the increasing use of this method in relation to the advantages it provides, such as the availability of the researcher or interviewer to answer any general questions the participant may have, the potential to screen participants and the opportunity to create interest in completing the questionnaire. Zikmund and Babin (2013:176) and Hair *et al*. (2008:112) postulate that although this survey method is costly, it is an effective way of generating a higher response rate.

A questionnaire can be self-administered or administered by an interviewer. A self-administered questionnaire can be delivered to the participant in different ways, for example via postal services, online or personally by the researcher (Kolb, 2008:195). Cant *et al*. (2005:100) define a self-administered questionnaire as one where the participant is requested to complete the questionnaire at his/her own time, with no interviewer being present to offer assistance.

In this study, a self-administered questionnaire using the drop-off survey method was used to collect the required data specified in Section 4.1. A major disadvantage of conducting telephone surveys is non-cooperation, whereby participants decline interviews (Berndt & Petzer, 2011:140). In a similar sense, scheduling an appointment over the telephone has the same disadvantage. As such, it was decided not to contact the participant beforehand and rather follow an unsolicited calling approach in this study. Therefore, the researcher personally visited each SSO individually to request permission for the questionnaire to be completed. After permission had been granted in person, the questionnaires used in this study were hand-delivered to the owners/managers of SSOs and collected at an agreed upon time two weeks later. As such, the participants could complete the questionnaire at their own convenience, as advised by Cant *et al*. (2005:100). The research instrument in this study, namely the questionnaire, will be discussed in the next section.

4.5.1 Questionnaire design

A questionnaire is a data collection tool that can be utilised in different ways when carrying out surveys, such as mail surveys, telephone interviews and self-administered surveys. The aim of the questionnaire is to gather information or ask questions relating to the research objectives (Cant *et al*., 2005:148; Zikmund & Babin, 2013:280). Hair *et al*. (2008:170) add that a questionnaire collects primary data using questions and scales set out on a formal document. Pallant (2007:7) emphasises that the questionnaire design is of vital importance to attain the information required for the research questions. A badly designed questionnaire may mislead the participants, which can result in the participant providing untrue information.

The physical appearance of a questionnaire can reflect on the participant's willingness to assist in completing the questionnaire. A poor questionnaire design will result in presenting a careless image and the participants may not see the true importance of completing the questionnaire (Iacobucci & Churchill, 2010:221). Hair *et al*. (2008:174) state a questionnaire should comprise an introductory section that explains the purpose of the research, instructions, and requests permission for completion. Berndt and Petzer (2011:197) concur stating that when using self-administered questionnaires, a soundly worded cover letter is essential to encourage the participant to participate in the research process and should, therefore, introduce the purpose of the study, ensure confidentiality, provide the relevant contact details and thank the participant for partaking in the study. However, the cover letter should not be long and should be kept to under a page.

Iacobucci and Churchill (2010:216) stress that the wording used in the questionnaire design will have a significant impact on the way the participants answer the questions. Hence, complicated wording will result in either unanswered or false information provided by the participants. McDaniel and Gates (2013:352) and Cant *et al*. (2005:155), therefore, suggest that attention is given to using simple direct questions, which are not ambiguous or vague, by ensuring that the questions do not contain words that could have two or more meanings. Moreover, the questions should be kept short and simple, leading or loaded questions should be avoided, negative questions containing words such as "don't" should be excluded and questions should not be structured in a double-barrelled sense, indicating that there could be two or more

possible answers to a single question (Pallant, 2007:10; Zikmund & Babin, 2013:287).

A researcher should determine whether the length of a questionnaire is acceptable and appropriate (Hair *et al*., 2008:174). Malhotra (2010:353) positions that a participant may view a shorter questionnaire as more appealing. On the contrary, this should not be done at the expense of overcrowding the questions to make the questionnaire appear shorter. According to Iacobucci and Churchill (2010:223), shorter questionnaires have various advantages, such as simplicity to complete, less time consuming, and participants may be more likely to partake if the questionnaire is short. Depending on the data collection method selected, McDaniel and Gates (2013:359) propose that the time to complete a questionnaire is generally between 15 and 20 minutes.

During the compilation of the questionnaire used in this study, the abovementioned recommendations were taken into consideration. The questionnaire of this study portrayed simple and brief objectives. Furthermore, the questionnaire contained a cover letter containing the necessary information pertaining to the study, confidentiality, permission and courtesy. As determined by the pre-testing phase of the questionnaire, the length of the questionnaire was considered and compiled to be completed under the time frame of 20 minutes, by avoiding question overcrowding. Annexure B presents the main questionnaire used in this study.

4.5.2 Questioning format

In order to obtain the necessary data, the study utilised a scale and multiple-choice questions that was developed on the foundations of the literature reviews conducted. The relevant literature on the various business management functions, entrepreneurship and SSOs was analysed in Chapter 2 and Chapter 3 provided details on the UBI services. The scale and multiple-choice questions developed and utilised in this study were in accordance with the primary objective (Section 1.3.1) and empirical objectives (Section 1.3.3) stipulated for this study. The 41-item scale measuring the importance of UBI services was in accordance with the first three objectives of this study (Section 1.3.3), and comprised six constructs, namely physical facilities (eight items), general business services (seven items), management services (five items), networking and professional services (seven items), financial consulting

services (nine items), and university services (five items). The business owners/managers' perceptions were measured on a six-point Likert scale (1 = very unimportant to 6 = very important) based on the participants' perceived importance or unimportance of the UBI services listed. An additional open-ended question was included in this section of the questionnaire, asking participants if there were any other services required that were not listed as part of the UBI services, thus to confirm content validity for this scale measuring the importance of UBI services.

The multiple-choice questions, measuring the business management functions that SSOs require at various phases in the business life cycle, was in accordance with the fourth empirical objective of this study (Section 1.3.3). The six multiple-choice questions included the UBI service constructs that are possibly important to SSOs owners/managers at various phases of the business life cycle. The owners/managers of the SSOs were requested to indicate at which phase of the business life cycle they considered the listed UBI service constructs to be important, whereby five possible choices was provided (1 = pre-start-up; 2 = start-up; 3 = growth; 4 = maturity; 5 = not applicable). The not applicable option was added to this section as some of the SSOs were not in the respective business life-cycle phase. Therefore, the owners/managers of these SSOs would not be able to indicate the importance of the UBI service construct within that business life-cycle phase. Lastly, the fourth section (Section D), of the questionnaire asked the participants to indicate their opinions on a dichotomous scale (1 = yes and 2 = no), on a number of statements relating to the value of UBI services.

In addition to the questionnaire design, question format needs to be established. According to Iacobucci and Churchill (2010:201), questionnaires may be disguised or undisguised. A disguised questionnaire does not make the participant aware of the study. In opposition, the participant is aware of the study within an undisguised questionnaire. Hair *et al*. (2008:172) differentiate between unstructured and structured questions. An unstructured question involves open-ended responses, whereby the participants are provided with flexibility to answer the question in the manner they wish to, in their own words. A structured question is more rigid, through which the participants are presented with closed-ended questions and may only select their answers from the predetermined answers available. Malhotra (2010:344) states that

structured questions may be portrayed in the form of multiple-choice questions, dichotomous questions or a scale. A multiple-choice question consists of a few possible answers, of which the participant is requested to select one, or sometimes more, of the given options (Cant *et al*., 2005:152). Kolb (2008:202) defines a dichotomous question as a question that only provides the participant with two possible answers, most likely to be opposites such as yes or no. Lastly, scaled questions are designed to capture the participants feeling.

Cant *et al*. (2005:132) describes a measurement in a numerical form by indicating that numbers are allocated to the characteristics of variables (objects, individuals or concepts). Scaling is the advancement of measurements, whereby a continuum is provided for the characteristics of these variables (Malhotra, 2010:282). In other words, a scale measures the participant's attitudes. Cant *et al*. (2005:137) postulate that scales may be either non-comparative (unidimensional or single-item) or comparative (multidimensional or multiple-item). A non-comparative scale is one that is proposed to measure only one characteristic of a variable and consists of continuous rating scales and itemised rating scales, while a comparative scale measures multiple characteristics of a variable and consists of rank order, paired comparison and constant sum. Moreover, non-comparative scaling is the most popular scaling technique in marketing research. Malhotra (2010:308) explains that an itemised rating scale describes each category by a numerical value that participants thus use to indicate their attitudes relating to the particular variable in question. Moreover, itemised rating scales consist of semantic differential, Stapel, and Likert scales. These scales can be described as follows:

- **Semantic differential scale:** A semantic differential scale measures the participant's attitudes towards a variable by stating opposite adjectives for each variable (Zikmund & Babin, 2013:266). Examples of the opposite objectives can be good/bad, like/dislike, helpful/unhelpful and so forth (Hair *et al*., 2008:155). These opposite objectives are placed on a five or seven point scale and the participants are requested to indicate, on blank spaces, how they view the variable being measured (Wiid & Diggines, 2013:157). This scale is useful when measuring the participants feeling towards a variable (Iacobucci & Churchill, 2010:242).

- **Stapel scale:** A Stapel scale is similar to the semantic differential scale. However, the Stapel scale eliminates the opposite adjectives for each variable and only includes one phrase or adjective. Moreover, the Stapel scale utilises numbers, instead of blank spaces, to measure the participant's attitudes (Malhotra, 2010:311). According to Wiid and Diggines (2013:158), the Stapel scale includes a 10-point rating scale, averaging between +5 and -5, whereby the adjective is placed in the middle of this rating scale. Cant *et al*. (2005:144) state that if the participants are in disagreement with the phrase, it will be indicated by a negative score and the greater the negative score, the greater the disagreement. The same sustains for a positive agreement.
- **Likert scale:** A Likert scale utilises a scale representing favourable or unfavourable attitudes towards the variable being measured. The attitudes are assigned to numerical values and the participants are requested to indicate their numerical value of agreement or disagreement to each variable (Cant *et al*., 2005:141). Hartley and Betts (2010:18) state that the scale representing the participant's attitudes toward the variable can consist of two, five, six, seven or 11 points, sometimes even more. Even scaled points are used more often in order to eliminate the neutral response positioned in the middle of an uneven scale. Malhotra (2010:308) suggests that the points range from strongly disagree to strongly agree. However, variations may exist for the words indicating strength or weakness towards an attitude; for example, they may range from true to untrue or important to unimportant (Hartley & Betts, 2010:18). Iacobucci and Churchill (2010:241) highlight that the Likert scale is widely used because it is easy to develop and participants do not have difficulty in providing their answers on this scale. In addition, the scale is best applied in a self-administered survey (Hair *et al*., 2008:155).

For the purpose of this study, an undisguised, structured, self-administered questionnaire was used. The self-administered measuring instrument utilised in this study was developed carefully according to the principles under the question format, as discussed in this section. The participants requested to participate in the study were informed about the study that they would partake in and as such, it was an undisguised questionnaire. Moreover, the questions on the questionnaire were developed in a structured way, thus representing closed-ended questions. The

questions that were used to obtain the participants demographic information comprised two dichotomous questions, where the participants had to indicate their current position in the company and gender. In addition, there were five multiple-choice questions where the participants had to indicate their type of service industry, number of employees, highest qualification, age and ethnic group, as well as two open-ended questions where the participants had to indicate the year in which the organisation was founded and the amount of ownership/management years at the current organisation. In Section B of the questionnaire of this study, a six-point Likert scale, ranging from very unimportant (1) to very important (6), was used to measure the extent to which the participants' perceive the importance or unimportance of the UBI services listed. As recommended by Cant *et al*. (2005:145), a midpoint or neutral option, suggesting an uncertain position on the statement, was not included due to the fact that participants tend to select the neutral option instead of considering the possible options for the statement that they have an opinion about. Therefore, to achieve the purpose of this study, a category of uncertainty was not applicable because the participant either perceive the UBI services listed as important to SSOs or not. Moreover, an open-ended question was included at the end of Section B, which requested participants to indicate if there were any other services required, in addition to the UBI services listed.

Section C included multiple-choice questions, whereby the attitudes were formed from the business life cycle principles, namely (1) pre-start-up, (2) start-up, (3) growth and (4) maturity to determine at which phase of the business life cycle the UBI service constructs were considered important to SSO owners/managers. This section also included a not applicable response category as suggested by Pallant (2007:10). The last section, Section D, only included dichotomous yes and no questions relating to the value of UBI services.

4.5.3 Questionnaire layout

The layout of the questionnaire will have an impact on the data collected (Hair *et al*., 2008:174). According to Malhotra (2010:335), there are no given guidelines to follow when constructing a good questionnaire. However, the purpose of the questionnaire should be highlighted by the research objectives intended to be accomplished (Zikmund & Babin, 2013:281). Widd and Diggines (2013:170) suggest that the layout

of the questionnaire should be at the ease of convenience for the participants, as they will provide the information required to achieve the research objectives. Iacobucci and Churchill (2010:221) concur, indicating that if the layout of the questionnaire has no order, the participants will feel reluctant to provide their information.

Berndt and Petzer (2011:197) propose that the questionnaire should begin with an introduction so that the participants can be informed about the research and the reasons why they are requested to participate. Hair *et al*. (2008:174) stipulate that after the introduction, the body − questions directly relating to the research objectives − of the questionnaire should follow and end with demographical questions. Demographical questions relate to classification information of the participant (Malhotra, 2010:350). However, there is uncertainty relating to whether demographical questions should be placed after the introduction of the questionnaire or after the body of the questionnaire. Cant *et al*. (2005:156) suggest that demographical questions generally are placed at the end of the questionnaire as they may contain questions posed as personal or threatening towards the participants. In this approach, the participants will not feel threatened in the beginning of the questionnaire, which may lead to them refusing to answer further questions. In contradiction, Swanepoel *et al*. (2006:291) indicate that it is best to place demographical questions before the body of the questionnaire. For the body of the questionnaire, Iacobucci and Churchill (2010:220) advise that the funnel approach be used. The funnel approach places questions with a broad scope first and then narrows it down to easier questions. Malhotra (2010:350) indicates that within the funnel approach, general questions are placed before specific questions. However, an inverted funnel approach may also be utilised, whereby specific questions are placed before general questions. In this respect, the participants are requested to assess specific questions on the research topic, before they conclude with general evaluations.

The questionnaire used in this study (refer to Annexure A) comprised four sections. Owing to the demographical question not being threatening or embarrassing for the participants to answer, these questions were placed before the body of the questionnaire. Section A (A1-A9) was designated to collect demographical information from the participants. Two filter questions relating to demographic

information were included in Section A to ascertain that the participants meet the necessary company position and company size requirements of the sample. These requirements included the participant's current position held in the SSO and the amount of employees employed by the SSO to ensure that the participants are part of the defined target population of business owner/manager of SSOs. As advised by Malhotra (2010:350), the inverted funnel approach was used, whereby specific questions relating to the research objective were placed before the general questions. Section B included specific questions and Sections C and D included general questions. The second section, Section B (B1-B41), measured the owners/managers' perceptions regarding the importance, or unimportance of UBI services. Section C (C1-C6) measured the phase in the business life cycle that the SSOs owner/managers required the various UBI service constructs. Lastly, Section D (D1-D3) measured the owners/managers presumed value of UBI services. In order to gather the required information related to the topic and research objectives presented in Section 1.3.3, a measuring instrument consisting of a scale, multiple-choice questions and dichotomous questions were developed based on the previous literature. Chapter 3 provided an overview of the various services incubators (refer to Table 3.1). Table 4.1 presents an overview of the UBI services divided into six constructs, namely physical facilities, general business services, management services, networking and professional services, financial consulting services and university services as well as a summary of previous research conducted on these UBI services.

Table 4.1 UBI services

UBI services	Authors
Construct 1: Physical facilities	
Telephone equipment	Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Computer and network equipment	Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)

Table 4.1 UBI services (continued…)

UBI services	Authors
Conference room	Colbert *et al*. (2010); Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004)
Cafeteria	Hsu *et al*. (2003); Kuratko & Hodgetts (2007); McAdam & Marlow (2008)
Affordable space and building facilities	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Peters *et al*. (2004); Von Zedtwitz & Grimaldi (2006)
Office equipment and furniture	Abduh *et al*. (2007); Meru & Struwig (2011); Peters *et al*. (2004); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Physical safety and building security	Erlewine & Gerl (2004); Meru & Struwig (2011); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Audi-visual equipment	Al-Mubaraki *et al*. (2010); Flavel & Kalendra (2008); Hsu *et al*. (2003); Verma (2004)
Construct 2: General business services	
Receptionist / Secretary	Hsu *et al*. (2003); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Photocopier / Fax machine / Scanner	Erlewine & Gerl (2004); Hsu *et al*. (2003); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Postal and express	Erlewine & Gerl (2004); Kuratko & Hodgetts (2007); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Stock handling / receiving	Kuratko & Hodgetts (2007); Verma (2004)

Table 4.1 UBI services (continued…)

UBI services	Authors
Clerical / Assistance services	Erlewine & Gerl (2004); Grigorian *et al*. (2010); Moore *et al*. (2008); Verma (2004)
Inventory management	Al-Mubaraki & Busler (2010); Al-Mubaraki & Busler (2011); Al-Mubaraki *et al*. (2013); Hsu *et al*. (2003)
Word processing services / Typing	Erlewine & Gerl (2004); Moore *et al*. (2008); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Construct 3: Management services	
Business plan development	Abduh *et al*. (2007); Grigorian *et al*. (2010); Hsu *et al*. (2003); Peters *et al*. (2004); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Advertising	Colbert *et al*. (2010); Erlewine & Gerl (2004); Hsu *et al*. (2003); Verma (2004)
Research and Development	Abduh *et al*. (2007); Bajmócy (2006); Grigorian *et al*. (2010); Somsuk & Laosirihongthong (2014)
Human resources management	Abduh *et al*. (2007); Grigorian *et al*. (2010); Hsu *et al*. (2003); Tötterman & Sten (2005); Verma (2004)
Product or service design and development	Abduh *et al*. (2007); Al-Mubaraki & Busler (2010); Erlewine & Gerl (2004)
Construct 4: Networking and professional services	
Business networks outside the incubator (strategic partners, other clients, and the like)	Abduh *et al*. (2007); Ahmad & Ingle (2011); Meru & Struwig (2011); McAdam & Marlow (2008)

Table 4.1 UBI services (continued…)

UBI services	Authors
Business networks between incubator tenants (peer networking, sharing information, experience, problems, and the like)	Abduh *et al*. (2007); Ahmad & Ingle (2011); Meru & Struwig (2011); McAdam & Marlow (2008)
Legal counselling	Frenkel *et al*. (2008); Grigorian *et al*. (2010); Meru & Struwig (2011); Peters *et al*. (2004:83); Verma (2004:125); Von Zedtwitz & Grimaldi (2006:461)
Legal representation	Grigorian *et al*. (2010:8); Meru & Struwig (2011); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Patent and intellectual property management	Abduh *et al*. (2007); Hsu *et al*. (2003); Meru & Struwig (2011); Tötterman & Sten (2005); Verma (2004)
Accounting or bookkeeping	Hsu *et al*. (2003); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Tötterman & Sten (2005); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Marketing management	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Hsu *et al*. (2003); Meru & Struwig (2011); Peters *et al*. (2004)
Construct 5: Financial consulting services	
Financial management	Abduh *et al*. (2007); Frenkel *et al*. (2008); Grigorian *et al*. (2010); Hsu *et al*. (2003); Meru & Struwig (2011); Ndabeni (2008a); Ndabeni (2008b); Peters *et al*. (2004); Verma (2004)

Table 4.1 UBI services (continued…)

UBI services	Authors
Accessing commercial bank loans	Al-Mubaraki & Busler (2010); Colbert *et al*. (2010); Erlewine & Gerl (2004); Somsuk & Laosirihongthong (2014)
Accessing government grants	Abduh *et al*. (2007); Colbert *et al*. (2010); Ndabeni (2008a); Ndabeni (2008b); Verma (2004)
Government procurement process	Abduh *et al*. (2007); Al-Mubaraki & Busler (2011); Al-Mubaraki *et al*. (2010); Verma (2004)
Government contract preparation	Flavel & Kalendra (2008); Verma (2004)
Accessing outside capital or equity	Abduh *et al*. (2007); Ndabeni (2008a); Ndabeni (2008b); Verma (2004); Von Zedtwitz & Grimaldi (2006)
Business taxes	Al-Mubaraki *et al*. (2010); Kuratko & Hodgetts (2007); Lin *et al*. (2012); Verma (2004)
Equity and debt finance	Colbert *et al*. (2010); Meru & Struwig (2011); Mutambi *et al*. (2010); Verma (2004)
Links to financial resources	Colbert *et al*. (2010); Erlewine & Gerl (2004); Frenkel *et al*. (2008); Moore *et al*. (2008)
Construct 6: University services	
Student employees	Erlewine & Gerl (2004); Grimaldi & Grandi, (2005); Moore *et al*., (2008)
Faculty consultants	Grimaldi & Grandi (2005); Moore *et al*. (2008); Tötterman & Sten (2005)

Table 4.1 UBI services (continued…)

UBI services	Authors
Library resources	Bajmócy (2006); Colbert *et al*. (2010); Grimaldi & Grandi (2005)
Comprehensive business training and education	Al-Mubaraki & Busler (2010); Colbert *et al*. (2010); Grimaldi & Grandi (2005); Somsuk & Laosirihongthong (2014)
Leadership training and coaching	Abduh *et al*. (2007); Ahmad & Ingle (2011); Colbert *et al*. (2010); Grigorian *et al*. (2010); Somsuk & Laosirihongthong (2014)

A cover letter, known as the introduction, briefly provided an overview of the study, purpose for selecting the specific participants to participate, confidentiality guarantees, thank you in advance and the researcher's contact details.

After the questionnaire was developed, it was subject to pre-testing and pilot testing prior to it being administered to the main sample. The next sections provide information regarding the methods that were followed.

4.6 PRE-TESTING OF THE QUESTIONNAIRE

Pre-testing of a questionnaire is essential, as it measures how the questionnaire will perform under real situations (Iacobucci & Churchill, 2010:223). According to Zikmund and Babin (2013:183), the first drafts of a questionnaire may be too long, instructions may be unclear, questions may be added unnecessarily or important questions may be missing, and the questions can be contradictory, inconclusive or confusing. As a result, Cant *et al*. (2005:156) highlight that a questionnaire must be pre-tested before it is administered. Wiid and Diggines (2013:171) state that the main functions of pre-testing a questionnaire is to determine any issues relating to the questionnaire, to allocate or test the time of answering the questions in the questionnaire, to ensure that the instructions can be easily understood and to identify the questions that may not be of practical use.

Where possible, a pre-test should be conducted under similar or exact situations as intended for the administration of the main study (Kolb, 2008:199). Protocol analysis and debriefing are two of the most popular methods used to pre-test a questionnaire. Within the debriefing approach to pre-testing, the interviewer debriefs the participants by describing the objectives of the study to the participants, and asking for feedback to ensure that the questions or items were interpreted as anticipated, following the completion of the questionnaire. Moreover, the results of the debriefing approach are applied through editing of the questionnaire, where only thereafter, the questionnaire is suitable to be administered to the pilot sample for further pre-testing, or to the main study sample (Malhotra, 2010:354).

The questionnaire utilised in the study, was pre-tested on seven individuals, namely two experienced researchers, three academic staff members and two SSO owners. In order to ascertain that first-language and second-language English-speaking participants could understand the questionnaire, three of the individuals were first-language English speakers and four were second-language English speakers. Owing to the multilingual context of the South African environment, it is important that all participants understand the questionnaire. In order to guarantee face and content validity, the questionnaire utilised within this study was pre-tested by applying the debriefing approach. Before the commencement of the debriefing approach, two experienced researchers within the respective field were called in to examine the questionnaire for any potential shortcomings or obvious mistakes. Thereafter, three academic staff members from related fields were requested to participate voluntarily in the debriefing method, together with two SSO owners located within the same region selected for the main study. However, the two SSOs selected did not form part of the main study. The two SSO owners were included to ensure the questionnaire could be understood correctly by the intended sample for the main study. It took the participants approximately 15 minutes to complete the questionnaire, which was sufficient according to McDaniel and Gates (2013:359). The results received from the debriefing method were applied to the questionnaire and the relevant adjustments were made.

On completion of the pre-testing stage, the questionnaire was subject to pilot testing, as a form of pre-testing, on a convenience sample of 30 owners/managers of SSOs, as

recommended by Hair *et al*. (2008:180), to ensure the reliability of the scale used in this study. These SSOs were not situated in the region selected for the main study and thus did not form part of the main sample. The results obtained from the pilot testing required adjustments, including format and wording, to be made to the questionnaire. After these adjustments were applied to the questionnaire, the final questionnaire, combined with a cover letter (refer to Annexure A), comprising 41 Likert-scaled items and 18 forced-scaled items, was distributed for the main survey.

4.7 ADMINISTRATION OF THE QUESTIONNAIRE

Following a successful pre-test, the main survey was conducted in January 2014. For the completion of this study, a non-probability judgement sample of 125 SSO owners/managers was used. A list of SSOs situated in the Vaal Triangle region was developed for the main study. It was decided not to contact the owners/managers of these SSOs prior to the visit due to the number of disadvantages associated with this method. Therefore, an unsolicited calling approach was followed whereby the researcher visited each of the SSOs individually, requesting permission from the SSO owner/manager to participate in the research process, by completing the questionnaire, on a voluntary basis. After the relevant permission was obtained from the relevant SSO owner/manager in person, the self-administered questionnaire was presented to the participating owners/managers of each SSO to be completed at their own convenience. After two weeks, the researcher contacted the owner/manager telephonically in order to arrange for the collection of the completed questionnaire at the time agreed upon, followed by the researcher hand collecting the questionnaires. An additional week for completion of the questionnaire was granted to those participants requiring additional time. In order to draw conclusions and formulate recommendations, the data collected from the study were tabulated and analysed. Chapter 5 reports on the research findings of this study.

4.8 PRELIMINARY DATA ANALYSIS

Iacobucci and Churchill (2010:32) state that data collected is meaningless unless it is transformed and analysed into meaningful data, which can be used to present the issues that it is intended to. This process is known as the data analysis, which includes various stages. The first three stages, popular to almost all research studies, is editing,

coding and tabulation. According to Cant *et al*. (2005:189), editing is done to ensure that the questionnaires were completed with minimal errors. In other words, editing enhances the accuracy and exactitude of the data gathered (Malhotra, 2010:453). Coding transforms the responses on the questionnaire into numbers, with the purpose of simplifying the process into a readily countable format (Zikmund & Babin, 2013:363). Hair *et al*. (2008:233) highlight that when responses are tabulated, frequencies are provided on a question-to-question foundation. Table 4.2 presents the coding of the data per construct.

Table 4.2: Coding of the data

Data type	Code	Question
Demographic data	**A1-A9**	**Section A: Questions A1-A9**
UBI services	**B1-B41**	**Section B: Items B1-B41**
Physical facilities	B1-B8	Section B: Items B1-B8
General business services	B9-B15	Section B: Items B9-B15
Management services	B16-B20	Section B: Items B16-B20
Networking and professional services	B21-B27	Section B: Items B21-B27
Financial consulting services	B28-B36	Section B: Items B28-B36
University services	B37-B41	Section B: Items B37-B41
Business life-cycle phases	**C1-C6**	**Section C: Items C1-C6**
UBI services value	**D1-D3**	**Section D: Items D1-D3**

The next section explains the statistical analysis procedures that were followed, after the preliminary data analysis.

4.9 STATISTICAL ANALYSIS

Swanepoel *et al*. (2006:3) express that during a research process, statistics will take an important role in extracting the necessary data from the information gathered. In other words, statistics will be utilised within the research process to make sense of the data.

The data captured within this study was analysed using SPSS, Version 22.0. The following statistical methods were applied on the empirical data sets:

- Reliability and validity analysis
- Descriptive analysis
- Correlation analysis
- One sample t-tests
- Two independent-sample t-tests
- One-way analysis of variance (ANOVA)
- Cluster analysis

The following sections describe these statistical methods in detail.

4.9.1 Reliability analysis

A reliability analysis is conducted in order to ensure that the results obtained are consistent and do not contain random errors (Pallant, 2007:6). According to Iacobucci and Churchill (2010:258), consistency refers to a situation whereby similarities are found within a concept when the same measure is utilised continuously. Random errors, which may arise under any conditions relating to variations in participant or measurement circumstances, create inconsistency (Hair *et al*., 2008:151; Malhotra, 2010:318). Cant *et al*. (2005:235) explain that an observation will be more reliable when it contains minimal errors, thus indicating that a correct measure will be one where no random error is found.

A reliability analysis generally consists of three methods, namely test-retest reliability, alternative forms reliability and internal consistency reliability (Malhotra, 2010:318). The three methods mentioned will be discussed in the following section:

- **Test-retest reliability:** This method of reliability involves two observations that are undertaken at different points in time, utilising the same instruments, within the same setting and either with the same objects or individuals (Iacobucci & Churchill, 2010:259; Malhotra, 2010:318). The main aim of this method is to determine whether there will be differences in the scores calculated from each of the two observations, whereby differences will be an indication of random error (McDaniel & Gates, 2013:286). Malhotra (2010: 318) expresses that a correlation coefficient is calculated between the two separate observations. According to Pallant (2007:6), a high correlation coefficient will result in a more reliable scale,

whereas a low correlation coefficient will be an indication of random error that may have occurred. Malhotra (2010:319) notes that there are various disadvantages associated with this method, including amongst others, sensitivity created by the period elapsed between the observations, whereby the first observation may alter the individual or objects perceptions before the next observation. Therefore, it may be impossible to create a second observation when testing some things, such as a new product, and during the second observation, participants might remember the answers they provided in the first observation.

- **Alternative-forms reliability:** Alternative-forms reliability is based on the same principles of test-retest reliability. This method includes two observations taken at different times, usually two weeks apart, under the same settings and with the same objects or individuals. However, this method uses two different instruments, or similar instruments (Malhotra, 2010:319).
- **Internal consistency reliability:** This method of reliability is based on the assumption that each item within a scale is measuring the same attribute in a situation where various items are summated to make up the entire scale (Iacobucci & Churchill, 2010:259; Pallant, 2007:6). There are many different ways to determine the internal consistency of a scale. However, one of the most popular ways of measuring the internal consistency of a multi-item measurement scale is by calculating the mean reliability coefficient, namely the Cronbach alpha (Pallant, 2007:6). The Cronbach alpha calculates an average correlation for all the items summating to a complete scale. The reliability of a scale is determined by the value of the Cronbach alpha, which ranges from zero to one, whereby greater reliability is illustrated by a higher value (Pallant 2007:6).

In this study, the reliability of the scale, as well as the reliability of the items included in the scale, was measured by the internal consistency method, through adopting the Cronbach coefficient alpha technique.

4.9.2 Validity analysis

Hair *et al*. (2008:151) express that the validity of a scale should be determined as not all reliable scales can be seen as valid. The validity of a scale can be seen as the degree to which the dissimilarities in the examined scales scores reflect true

dissimilarities between the objects or items on the attribute being measured (Iacobucci & Churchill, 2010:256; Malhotra, 2010:320). In other words, the validity of a scale is the extent to which the scale is measuring what is expected to measure (Hair *et al.*, 2008:151; Pallant, 2008:7).

There are three main types of methods for determining validity, namely content validity, criterion validity and construct validity (Pallant, 2007:7; Malhotra, 2010:320). These three methods can be described as follows:

- **Content validity:** Content validity is sometimes referred to as face validity. According to Iacobucci and Churchill (2010:256), content validity assesses the items on a scale in order to ensure that the items directly indicate the intent of what it is supposed to measure. Malhotra (2010:320) adds that content validity warrants the representativeness of a scale. McDaniel and Gates (2013:290) highlight that the process of determining content validity can be complicated. In order to ensure content validity, the researcher must provide a precise definition of what is being measured, analyse the literature to include all possible items on the scale, consult with experts in the field and conduct a pre-test on the scale before administering it to the main sample. However, Malhotra (2010:320) advise that content validity is not an adequate measure of validity, unless it is used with other measures of validity like criterion validity.
- **Criterion validity:** Criterion validity considers the scale scores in relation with other related and measurable criteria (Pallant, 2007:7). Malhotra (2010:320) elaborates that demographic, psychographic, attitudes and behavioural characteristics, among others, may form part of the additional criteria with which the scale scores need to be associated. McDaniel and Gates (2013:292) indicate that criterion validity consists of two sub-categories, namely predictive and concurrent validity. Predictive validity is the level to which a future criterion item can be determined based on the forecast of the current measurement scale. In comparison, concurrent validity assesses the likeliness that two items being measured at the same point in time can produce the same outcome based on the measurement instrument utilised. Malhotra (2010:320) adds that with predictive validity, the scale should be administered at two different points in time, where one will be in the present and the other will be in the future, whereas with

predictive validity, variations of the scale will be measured at the same point in time.

- **Construct validity:** This form of validity concerns itself with the theoretical foundations to which the scale conforms. In other words, the resulting information provided by the measure should have a strong linkage to the theoretical foundations underlying the major criteria of the scale (McDaniel & Gates, 2013:293). Malhotra (2010:321) states that construct validity are made up of convergent, discriminant and nomological validity. According to Zikmund and Babin (2013:260), convergent validity is based on the assumption that a relationship should exist between any number of scales proposed to measure a single construct or subject. In contrast, McDaniel and Gates (2013:293) position that discriminant validity indicates a situation where there should not be a relationship between items intending to measure two or more separate constructs on a single scale. A lack of relationship between these constructs will be an indication of the difference that is meant to exist. Malhotra (2010:321) defines nomological validity as the degree to which theoretical foundations create a relationship between different, however, related constructs.

The construct validity of the scale utilised in this study was determined through using Cronbach alpha values and inter-item correlations. Moreover, content validity was measured by adding an open-ended question to Section B of the questionnaire. The above sections were concentrated on providing a description of the reliability and validity analysis conducted in the study. The following section highlights the descriptive analysis undertaken.

4.9.3 Descriptive analysis

Descriptive analysis is used when complex frequency tables need to be summarised in order to simplify the information provided on the variables (Malhotra, 2010:486). Pallant (2007:53) highlights that descriptive analysis has several advantages, which may include the opportunity to identify any characteristics on the variables, noting any deviances on the variables that could prevent the researcher from obtaining information on the posed research questions and descriptive analysis may assist in dealing with research questions.

Malhotra (2010:486) identifies that there are three popular statistics related to descriptive analysis. These statistics are known better as the measures of location (mean, median and mode), measures of variability (range, variance and standard deviation) and lastly, measures of shape (skewness and kurtosis). The following section provides a brief overview of these statistics:

- **Measures of location:** The measure of location is often referred to as a measure of central tendency. This measure consists of the mean, median and mode (Hair *et al*., 2008:246). According to McDaniel and Gates (2013:458), the mean of a sample is calculated by adding up the total responses for a specific construct or variable and dividing the respective total received by the complete number in the sample. Thus, the mean derives an average value for a specific construct or variable from the total number of responses (Kolb, 2008:254). The median is the value representing the central position of data arranged in sequence either from the highest or lowest value (Zikmund & Babin, 2013:340). Hair *et al*. (2008:247) define the mode as the value that appears the most repeatedly amongst all the responses received for a specific variable.
- **Measures of variability:** In comparison to measures of location, whereby focus is placed on values for a particular variable or construct, measures of variability or dispersion examine the data set as a whole and the broadness of the data (McDaniel & Gates, 2013:458). Measures of variability generally include range, variance and standard deviation. Hair *et al*. (2008:248) state that the range is calculated as the difference between the smallest and largest value of the variables. Malhotra (2010:487) defines the variance as the mean squared value and the standard deviation as the square root value of the variance.
- **Measures of shape:** Measures of shape is concerned with the distribution of the variables, when graphically presented. This measure comprises skewness and kurtosis (Pallant, 2007:56). Malhotra (2010:488) compares skewness and kurtosis by indicating that the skewness examines the symmetry of the mean and kurtosis represents the relative peakedness or flatness of the curve, in the perspective of a frequency distribution. Furthermore, an equal mean, mode and median would be illustrated by symmetric distribution, which will release a zero value for the skewness and kurtosis. As such, skewness is the unequal distribution of the mean,

mode and median. Swanepoel *et al*. (2006:68) differentiate between positively and negatively skewed distributions, where positive distributions are skewed to the right and negative distributions are skewed to the left.

This study employed the statistical methods of descriptive analysis by calculating the mean, mode, median, standard deviation, skewness and kurtosis values. This provided insights to the characteristics and distributions of the data sets. The following section provides an overview of the correlation analysis conducted in this study.

4.9.4 Correlation analysis

Correlation analysis measures the link of association between two or more variables. This analysis examines the relationships, if any, between the variables pertaining to separate constructs (Iacobucci & Churchill, 2010:441). According to Hair *et al*. (2008:286), the Pearson Product-Moment correlation coefficient determines the strength of a linear relationship between two or more metric variables. McDaniel and Gates (2013:526) emphasise that a relationship is identified when a change in one variable affects or creates a change in another variable. Pallant (2007:126) adds that a positive correlation can be found when an increase in one variable has the same effect on the other variables, denoted by a +1, whereas a negative correlation will cause an opposite effect to the variables by decreasing the one when the other is increased, represented by a -1. Moreover, the strength of a relationship is determined by the value, whereby the Pearson correlation coefficient can only release values from -1 to +1. A correlation value of zero indicates a non-existent relationship between the two variables.

Pearson's correlation coefficient was employed in this study in order to identify any positive or negative relationships between the constructs, and the strength of such relationships. The significance tests utilised will be explained next.

4.9.5 Tests of significance

Kolb (2008:257) states that significance testing should begin with a statement, whereby proof is gathered to ascertain the statement made. As such, significance testing involves hypotheses. According to McDaniel and Gates (2013:472), a hypothesis is a supposition made by a researcher concerning a specific characteristic

of the population undergoing examination. Moreover, hypotheses can take two forms, namely a null hypothesis and an alternative hypothesis. Hair *et al*. (2008:54) state that a null hypothesis (Ho) is an assumption made to indicate that there was not a relationship found between the variables being tested. In opposition, an alternative hypothesis (Ha) is developed in support of a relationship existing among the variables being tested. Both the hypotheses cannot be accepted, therefore the null hypothesis is the hypothesis that is tested by comparing the test statistic's probability with the specified significance level, and, accordingly, make the decision of whether to reject or not to reject the null hypothesis. An appropriate statistical test should be decided on after the hypotheses are developed (Malhotra, 2010:490). Kolb (2008:257) adds that there are many different types of tests to be considered. However, the method selected will depend on the type of hypotheses developed, data collection designs and levels of significance identified.

For the purpose of this study, four hypotheses were formulated and the significant level set at $\alpha = 0.05$ (Malhotra, 2010:492). A discussion on the statistical techniques used to test these hypotheses follows.

4.9.5.1 Statistical significance testing of mean differences between independent samples

A t-test is employed to analyse whether any statistical significant differences exist between the mean values of two unrelated groups (Kolb, 2008:257). Malhotra (2010:504) states that one-sample t-tests can be utilised to determine a hypothesis when only one variable is included that should be tested against a known or given standard. In this sense, the one-sample t-test compares the mean value of the variable against the expected mean value of the known or given standard. To determine the primary objective of this study, namely the important incubator services that SSO owners/managers require from a UBI, one-sample t-tests were applied to identify the important UBI services, with the UBI services means set against an expected mean value of 3 ($X > 3$).

Pallant (2007:232) differentiates between independent-samples t-test and paired-samples t-test by indicating that an independent-samples t-test compares mean values of two different groups of people or situations. In opposition, a paired-samples t-test

compares the mean values of the same group of people or situations, but at different points in time or under different situations. Independent-samples t-tests were conducted in this study to determine the differences, or no differences between the ages of the SSOs and providing further insights to the value of UBI services.

McDaniel and Gates (2013:499) emphasise that the analysis of variance (ANOVA) tests are most suitable when the researcher would like to compare the mean values of two or more independent samples to establish whether there are differences between the samples, or not. Malhotra (2010:531) adds that ANOVA can only be conducted if there is a dependent variable that is metric, meaning that it is measured on an interval or ratio scale, and one or more independent variables that are categorical, or nonmetric. According to Pallant (2007:242), one-way ANOVA only has one independent variable, whereas two-way ANOVA has more than one independent variable. For the purpose of this study, one-way ANOVA was used to test the hypotheses developed for the differences between the UBI service constructs and SSO industry sectors, the importance of UBI service constructs over the business life-cycle phases and for the comparisons between the clusters and UBI service constructs.

A Mann-Whitney U-test, which is a non-parametric alternative to the independent-samples t-test, measures differences between two independent groups of people or situations. The largest difference between the independent-samples t-tests and the Mann-Whitney U-tests is that the Mann-Whitney U-tests compare the differences between the medians of the variables, instead of the mean values (Pallant, 2007:220). Mann-Whitney U-tests were carried out in this study to provide cross-comparisons between the clusters and demographics.

4.9.5.2 Practical significance testing of mean differences between dependent samples: Cohen's D-statistic

Statistical significance is concluded when there is a difference between two variables and the difference is not a result of chance or sampling error. However, statistically significant differences increase within larger sample sizes, where very small statistical significant differences could be found (Cant *et al.*, 2005:216). As such, Pallant (2007:208) advises that an effect size should be calculated on the statistically significant difference between the variables. Moreover, the calculation of Cohen's D-

statistic is a common measure of computing effect sizes, whereby the following guidelines should be applied to the strength of effect sizes:

- $0.20 \leq d < 0.50$ – small effect, practically non-significant
- $0.50 \leq d < 0.80$ – medium effect, points towards being practically significant
- $0.80 \leq d$ – large effect and the results are practically significant.

4.9.6 Cluster analysis

McDaniel and Gates (2013:555) emphasise that cluster analysis is a statistical process used to classify objects or individuals into groups with similar characteristics. The similarities found can be determined through using specific variables or measurements. Thus, cluster analysis aims to develop clusters or groups that represent high levels of internal homogeneity, that is within the clusters, and conversely, high levels of heterogeneity between the clusters or externally. Iacobucci and Churchill (2010:506) concur, indicating that the individuals or objects within each cluster should signify high levels of similarities and dissimilarities between the individuals or objects grouped in the other clusters.

Malhotra (2010:664) indicates that cluster analysis should be conducted by using a number of steps, which builds to the statistical processes of cluster analysis. The process should begin with the statement of a problem, whereby the relevant data should be selected for the cluster analysis process. Following on this step, the distance measure should be determined, which is the measurement of how similar or dissimilar the individuals or objects clustered actually are. Wiid and Diggines (2013:290) differentiate between the Euclidean distance, the squared Euclidean distance and Mahalanobis distance as measures of distance. The Euclidean distance measures the regular distance between the groups identified and the squared Euclidean is the square measure of the distance determined. Malhotra (2010:664) advises that once the appropriate measure of distance has been selected, the clustering procedure needs to be selected, whereby careful attention should be provided to selecting the procedure most applicable to the problem being investigated. The two most common clustering procedures are known as hierarchical clustering methods and non-hierarchical clustering methods, which can be explained as follows:

- **Hierarchical clustering methods:** Hierarchical clustering can be sub-divided to consist of agglomerative clustering or divisive clustering. The process of agglomerative clustering begins by placing the individuals or objects into separate clusters and continues until larger clusters are formed, whereby eventually the individuals or objects will be in one large cluster. Adversely, divisive clustering takes place when the individuals or objects are placed into one large cluster and the individuals or objects are divided into smaller clusters, which eventually leads to the individuals or objects being placed in their own clusters (Malhotra, 2010:666). Wiid and Diggines (2013:291) explain that various hierarchical clustering algorithms can be utilised to measure the distance between the clusters formed in the hierarchical clustering, namely between groups average linkage, within-groups average linkage, single linkage, complete linkage and Ward's method. For the purpose of this study, hierarchical agglomerative clustering will be used, together with Ward's linkage. Malhotra (2010:667) explains Ward's linkage as a variance method. Variance methods develop clusters in order to minimise the variances found within each cluster. As a variance method, Ward's linkage computes the mean values for each individual or object and minimises the distances through utilising the squared Euclidean distance measurement.
- **Non-hierarchical clustering methods:** According to Wiid and Diggines (2013:291), when using non-hierarchical clustering methods, a pre-determined number of clusters have to be decided upon. Hereafter, the individuals or objects will be shifted from cluster to cluster to determine which individuals or objects will represent high levels of similarity within the pre-determined clusters and also, high levels of dissimilarities between the clusters. McDaniel and Gates (2013:558) state that non-hierarchical clustering methods are also referred to as K-means cluster analysis that is a multivariate procedure utilised to group individuals or objects into clusters based on their closeness to each other. Malhotra (2010:667) adds that non-hierarchical methods consist of sequential threshold, parallel threshold and lastly, optimising partitioning.

As mentioned above, the cluster analysis process used in this study will be conducted by way of hierarchical agglomerative clustering, using Ward's linkage and the squared Euclidean distance measurement. In order to complete the cluster analysis process, Malhotra (2010:664) states that the number of clusters should be decided

upon, the clusters should also be interpreted and validated. This should be done after the abovementioned procedures have been conducted.

The following chapter, Chapter 5, reports on the cluster analysis procedures undertaken for the study, as explained under this section.

4.10 CONCLUSION

This chapter supplied an outline of the research methodologies employed for the empirical portion of the study. This was done in line with the research objectives specified in Section 1.3 of Chapter 1. The chapter included discussions on the research design, research approach, sampling procedure, data collection methods, pre-testing of the questionnaire, administration of the questionnaire, preliminary data analysis and statistical analysis. The information emanating from this chapter will contribute towards the analysis and interpretation of the empirical study, determined by the main study, presented in Chapter 5. Chapter 5, analysis and interpretation of empirical study, will lead to the final chapter, Chapter 6, whereby conclusions will be deduced and recommendations made accordingly.

CHAPTER 5
ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS

5.1 INTRODUCTION

The previous chapter, Chapter 4, highlighted the research methodology used for this study. This chapter reports on the analysis and interpretation of the empirical findings of the study's pilot and main survey. This chapter begins with the results of the pilot test in Section 5.2, followed by a summary of the data gathering process in Section 5.3 and the results obtained from the preliminary data analysis in Section 5.4, which entails coding and tabulation. The sample description is presented in Section 5.5, which is separated into concise descriptions of the demographical information of the participants. The reliability and validity of the scale is discussed in Section 5.6 and the descriptive statistics in Section 5.7. Section 5.8 reports on the correlation analysis conducted to determine any potential relationships. The empirical objectives, as formulated in Chapter 1, are presented in Section 5.9. Statistical tests in the form of one-sample t-tests, two independent-sample t-tests and ANOVA are provided for some of the hypotheses developed to serve the empirical objectives. Stack bar charts and histogram charts were provided for the empirical objectives that did not require statistical tests. Further inferential statistics are utilised in Section 5.10 in terms of cluster analysis.

The data analysis for the pilot test and main survey questionnaire were analysed utilising SPSS, Version 22.0. The data analysis outlined in this chapter, comprised two stages. The first stage entailed analysing the results of the pilot testing of the questionnaire. The second stage involved analysing the results found within the main survey's data sets. The data analysis procedure employed in the pilot phase of this study is discussed in the following section.

5.2 RESULTS OF THE PILOT TEST

A pre-test was conducted on the questionnaire in order to confirm face and content validity before the questionnaire was exposed to pilot testing. For the pre-testing of

the research instrument, two experienced researchers, three academic staff members and two SSO owners were interviewed using the debriefing approach. Experienced researchers and academic staff members were utilised to ascertain that the questionnaire could be interpreted easily and the SSO owners were utilised to ensure that the questionnaire would be understood correctly by the intended sample for the main study. The SSO owners selected did not form part of the main study. Owing to the multilingual context of the South African environment, it is important that all participants understand the questionnaire and, therefore, three of the individuals' first language was English, whilst the other four were second language English speakers. Minor suggestions on the wording and flow of questions were implemented to improve the questionnaire. The refined questionnaire comprised 41 Likert-scaled items and 12 forced-scale items. After completion of the pre-test, the questionnaire was piloted (Annexure A) on a convenience sample of 30 owners/managers of SSOs, who did not form part of the demarcated area of this study, in order to determine the reliability of the scale. It should be noted that only the reliability of the UBI services scale was computed, as this is the only rating scale utilised in the questionnaire. The results pertaining to the reliability of the UBI services scale found within in the pilot test are presented in Table 5.1.

Table 5.1 Summary of the pilot testing results

Constructs	Number of items	Mean	Standard deviation	Cronbach alpha	Average inter-item correlation
Construct 1 – Physical facilities	8	3.746	0.810	0.651	0.193
Construct 2 – General business services	7	3.881	1.167	0.759	0.308
Construct 3 – Management services	5	4.453	1.128	0.757	0.409
Construct 4 – Networking and professional services	7	4.138	1.271	0.847	0.451
Construct 5 – Financial consulting services	9	3.137	1.267	0.889	0.469
Construct 6 – University services	5	3.040	1.442	0.831	0.487

A pilot test, utilised to determine the reliability of a questionnaire, is conducted to test a smaller sample of the participants that are similar to those used in the main survey. One of the major purposes of the pilot test is to ensure that the questions are constructed in manner that does not lead to misinterpretations or ambiguity (McDaniel & Gates, 2013:360). The reliability of the scale for the importance of UBI services was determined through the computation of Cronbach alpha values. As shown in Table 5.1, a Cronbach alpha value of 0.941 was returned for the overall scale consisting of 41 items. The Cronbach alpha values produced per construct ranged from 0.651 to 0.889, exceeding the recommended level of 0.600 (Malhotra, 2010:319), which is indicative of internal consistency reliability. The average inter-item correlation value returned for the overall scale was 0.274, which is between the suggested values of 0.15 and 0.50 (Clark & Watson, 1995:316). Moreover, the average inter-items correlations per construct are also between the suggested values and, therefore, deemed suitable.

The above results of the pilot test indicate that the scale used to measure the

importance of UBI services is reliable. However, the results of the pilot test suggested format changes, whereby Section B and C were separated, Section D was eliminated and an open-ended question was added to Section E with a dichotomous scale, making this Section D. Irrespective of the format changes made to the pilot survey, the 41 items of Section B remained the same for the main survey questionnaire. The main survey questionnaire, developed according to these changes, is presented in Annexure B. Table 5.2 presents a description of the constructs and items used for Section B of the main survey questionnaire.

Table 5.2 Description of items and constructs

Code	Items	Constructs
B1	Telephone equipment	
B2	Computer and network equipment	
B3	Conference room	
B4	Cafeteria	Construct 1 –
B5	Affordable space and building facilities	Physical facilities
B6	Office equipment and furniture	
B7	Physical safety and building security	
B8	Audio-visual equipment	
B9	Receptionist / secretary	
B10	Photocopier / fax machine / scanner	
B11	Postal and express	Construct 2 –
B12	Stock handling / receiving	General business
B13	Clerical / assistance services	services
B14	Inventory management	
B15	Word processing services / typing	
B16	Business plan development	
B17	Advertising	Construct 3 –
B18	Research and development	Management
B19	Human resource management	services
B20	Product or service design and development	

Table 5.2 Description of items and constructs (continued…)

Code	Items	Constructs
B21	Business networks outside the incubator (strategic partners, other clients, and the like)	Construct 4 – Networking and professional services
B22	Business networks between incubator tenants (peer networking, sharing information, experience, problems, and the like)	
B23	Legal counselling	
B24	Legal representation	
B25	Patent and intellectual property management	
B26	Accounting or bookkeeping	
B27	Marketing management	
B28	Financial management	Construct 5 – Financial consulting services
B29	Accessing commercial bank loans	
B30	Accessing government grants	
B31	Government procurement process	
B32	Government contract preparation	
B33	Accessing outside capital or equity	
B34	Business taxes	
B35	Equity and debt finance	
B36	Links to financial resources	
B37	Student employees	Construct 6 – University services
B38	Faculty consultants	
B39	Library consultants	
B40	Comprehensive business training and education	
B41	Leadership training and coaching	

The following section addresses the data gathering process undertaken in this study.

5.3 DATA GATHERING PROCESS

The data for this study were collected from owners/managers of SSOs in the Vaal Triangle region. A self-administered questionnaire using the drop-off survey method was used to collect the required data. In accordance with the sampling plan set out in Chapter 4, the SSOs were not contacted beforehand but an unsolicited calling approach was followed instead. Once permission had been obtained in person from SSO owners/managers to partake in the study, 125 questionnaires were distributed amongst SSO owners/managers across the different service industry sectors, namely the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors − 25 per industry. All participants were informed that participation was strictly voluntary. Of the 125 questionnaires handed out, 108 completed questionnaires, indicating an 86 percent response rate, were returned and deemed suitable against the filtering criteria applied. The following section addresses the preliminary data analysis process undertaken in this study.

5.4 PRELIMINARY DATA ANALYSIS

A preliminary data analysis should be conducted before the data set is analysed. This entails validation and editing for quality control purposes, coding, data entry, logical cleaning of data, tabulation and statistical analysis (McDaniel & Gates, 2013:436).

5.4.1 Coding

Coding refers to the allocation of code numbers to every category or class that participants use to indicate their responses. Coding is used to convert raw data by assigning numbers to the items, which is followed by entering the usable information into a computer and tabulating the results (Wiid & Diggines, 2013:222). The main survey questionnaire used in this study was divided into four sections, namely Section A (9 items), demographical data, Section B (41 items), determinants of the importance of UBI services required by SSOs, Section C (6 items), determinants of the phase/s when the UBI service constructs are/were required and Section D (3 items) the value of UBI services. Table 5.3 presents the variables, codes and assigned values used in Section A, B, C and D of the final questionnaire.

Table 5.3 Coding information

Section A: Demographical and importance of UBI services data			
Question	**Code**	**Construct measured**	**Value**
Question 1	A1	Type of service industry	Auto (1), Estate agents & property management (2), Health care & beauty (3), Hospitality & accommodation (4), Professional (5), Other (6)
Question 2	A2	Current position in company	Owner (1), Manager (2)
Question 3	A3	Year the organisation was started	Open answer
Question 4	A4	Years of ownership/management	Open answer
Question 5	A5	Number of employees	0-9 employees (1), 10-19 employees (2), 20-29 employees (3), 30-39 employees (4), 40-49 employees (5), 50 or more employees (6)
Question 6	A6	Owner/manager's highest qualification	Grade 12/matric (1), Diploma/degree (2), B.Tech/honours (3), Post-graduate (4), Other (5)
Question 7	A7	Owner/manager's age	Younger than 20 (1), between 20 and 29 years old (2), between 30 and 39 years old (3), between 40 and 49 years old (4), between 50 and 59 years old (5), Over 60 years old (6)
Question 8	A8	Gender	Male (1), Female (2)
Question 9	A9	Ethnic group	African/Black (1), Coloured (2), Indian /Asian (3),White (4), Other (5)

Table 5.3 Coding information (continued…)

Section B: Importance of UBI services			
Item	**Code**	**Construct measured**	**Value**
Item 1	B1	Physical facilities	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 2	B2		
Item 3	B3		
Item 4	B4		
Item 5	B5		
Item 6	B6		
Item 7	B7		
Item 8	B8		
Item 9	B9	General business services	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 10	B10		
Item 11	B11		
Item 12	B12		
Item 13	B13		
Item 14	B14		
Item 15	B15		

Table 5.3 Coding information (continued…)

Section B: Importance of UBI services			
Item	**Code**	**Construct measured**	**Value**
Item 16	B16	Management services	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 17	B17		
Item 18	B18		
Item 19	B19		
Item 20	B20		
Item 21	B21	Networking and professional services	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 22	B22		
Item 23	B23		
Item 24	B24		
Item 25	B25		
Item 26	B26		
Item 27	B27		

Table 5.3 Coding information (continued…)

Section B: Importance of UBI services			
Item	**Code**	**Construct measured**	**Value**
Item 28	B28	Financial consulting services	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 29	B29		
Item 30	B30		
Item 31	B31		
Item 32	B32		
Item 33	B33		
Item 34	B34		
Item 35	B35		
Item 36	B36		
Item 37	B37	University services	Very unimportant (1), Unimportant (2), Somewhat unimportant (3), Somewhat important (4), Important (5), Very important (6)
Item 38	B38		
Item 39	B39		
Item 40	B40		
Item 41	B41		

Table 5.3 Coding information (continued…)

Section C: Business life-cycle phase when UBI services required			
Item	**Code**	**Construct measured**	**Value**
Item 1	C1	Physical facilities	Pre-start-up phase (1), Start-up phase (2), Growth (3), Maturity (4), Not applicable (5)
Item 2	C2	General business services	
Item 3	C3	Management services	
Item 4	C4	Networking and professional services	
Item 5	C5	Financial consulting services	
Item 6	C6	University services	
Section D: Value of UBI services			
Question	**Code**	**Construct measured**	**Value**
Question 1	D1	UBI would have made a difference in the past	Yes (1), No (2)
Question 2	D2	UBI will make a difference now	
Question 3	D3	Interested in the services of a UBI now	

Once the data has been coded, the next step is to gather the data from the participants. An overview of the data obtained by this questionnaire, in the form of tabulation, is presented in the following section.

5.4.2 Tabulation

The next step after coding is to tabulate the data. According to Iacobucci and Churchill (2010:32), tabulation arranges the data in the form of a table by counting the frequencies of responses received per question. The frequencies obtained from the total sample, for Section B of the questionnaire, which aimed at measuring the perceived importance of UBI services by owners/managers of SSOs (B1-B41), are presented in Table 5.4.

Table 5.4 Frequency table of responses: importance of UBI services

Scale item	Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
	1	**2**	**3**	**4**	**5**	**6**
B1	3	4	0	0	10	91
B2	5	1	2	6	12	82
B3	22	26	18	15	7	20
B4	39	30	15	12	3	9
B5	5	5	4	12	26	56
B6	3	3	12	14	21	55
B7	3	5	4	10	29	57
B8	15	16	19	21	22	15
B9	14	5	11	12	16	50
B10	10	2	7	3	20	66
B11	8	9	10	25	23	33
B12	10	11	6	13	16	52
B13	9	12	18	18	24	27

Table 5.4 Frequency table of responses: importance of UBI services (continued…)

Scale item	Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
B14	10	8	19	16	23	32
B15	10	6	16	18	26	32
B16	6	10	6	28	24	34
B17	3	3	7	9	25	61
B18	3	5	12	27	27	34
B19	7	12	11	33	29	16
B20	11	8	14	19	20	36
B21	8	5	6	29	17	43
B22	7	4	11	23	31	32
B23	9	9	20	20	19	31
B24	8	7	17	23	17	36
B25	11	13	21	23	19	21
B26	3	0	4	7	24	70
B27	5	1	5	19	33	45
B28	5	1	6	9	25	62
B29	10	11	12	28	20	27
B30	23	16	17	25	17	10
B31	26	21	18	26	11	6
B32	24	21	19	18	11	15
B33	19	9	20	30	15	15
B34	5	4	6	26	23	44
B35	11	9	9	29	23	27
B36	9	5	10	20	27	37
B37	21	16	18	25	15	13
B38	19	30	24	16	11	8

Table 5.4 Frequency table of responses: importance of UBI services (continued…)

Scale item	Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
B39	33	28	18	12	9	8
B40	14	12	11	24	18	29
B41	10	13	9	24	25	27

Table 5.5 illustrates the frequencies obtained from the total sample for Section C of the questionnaire, which aimed at measuring SSO owners/managers' perceptions of the importance of each UBI service construct during the pre-start-up, start-up, growth or maturity phases of the business life cycle (C1-C6). A 'not applicable' option was provided in this section, which enabled the SSO owner/manager to select this option if he/she felt the UBI services construct listed was not applicable to his/her SSO at the given time.

Table 5.5 Frequency table of responses: business life-cycle phases when the UBI service constructs were required

Scale item	Pre-start-up	Start-up	Growth	Maturity	Not applicable
	1	2	3	4	5
C1	32	26	18	12	19
C2	26	25	25	13	18
C3	22	26	22	16	21
C4	20	17	37	17	16
C5	33	14	32	10	18
C6	11	6	28	4	58

Table 5.6 shows the frequencies for the responses received from the total sample for Section D of the questionnaire, which aimed at measuring the perceived value of UBI services as considered by the SSO owner/manager (D1-D3).

Table 5.6 Frequency table of responses: value of UBI services

Scale item	Yes 1	No 2
D1	49	59
D2	49	59
D3	35	73

The above sections have concentrated on summarising the pilot test results and preliminary data analysis in the form of coding and tabulation of the data. The next section, Section 5.5, provides a summary of the sample description calculated for this study.

5.5 SAMPLE DESCRIPTION

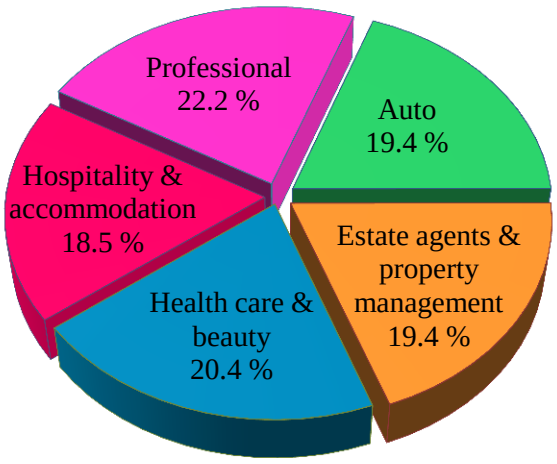
This section reports on the demographic characteristics of the sample. Demographical information makes sense of the data by highlighting the attributes of participants used in the sample such as their age, gender, education and occupation (Iacobucci & Churchill, 2010:177). Throughout this section, frequency tables, bar graphs and pie charts were employed to present this information. The sample comprised 108 owners/managers of SSOs in the Vaal Triangle region of South Africa. The demographical information requested was gathered in Section A of the questionnaire and includes:

- service industry sector
- gender profile
- current position in the organisation
- organisation age
- years of ownership/management at the organisation
- number of employees
- highest qualification
- participant's age

Table 5.7 presents a summary of the distribution of the participants according to the service industry sector in which they operate.

Table 5.7 Service industry sector

	Frequency *f*	Percentage %
Auto	21	19.4
Estate agents and property management	21	19.4
Health care and beauty	22	20.4
Hospitality and accommodation	20	18.5
Professional	24	22.2
N	108	100.0



The participants included in this study comprised one sample group made up of participants from five service industry sectors, namely the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors. Table 5.7 presents the classification information of the total sample (N) of 108 SSO owners/managers. As illustrated in Table 5.7, 22.2 percent of the participants form part of the professional service industry, 20.4 percent from the health care and beauty service industry, 19.4, percent from the auto industry as well as 19.4 percent from the estate agents and property management service industry and 18.5 percent from the hospitality and accommodation service industry.

Table 5.8 illustrates the gender profile of the participants.

Table 5.8 Gender profile

	Frequency *f*	Percentage %
Male	41	38
Female	67	62
N	108	100.0

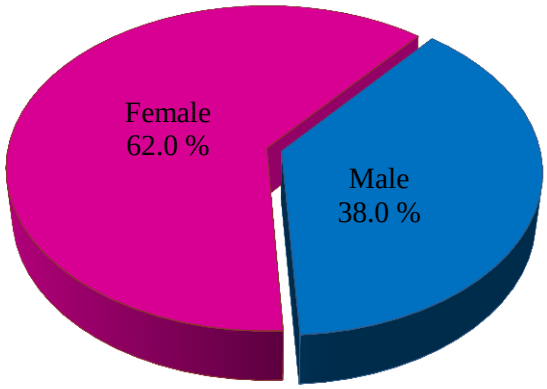
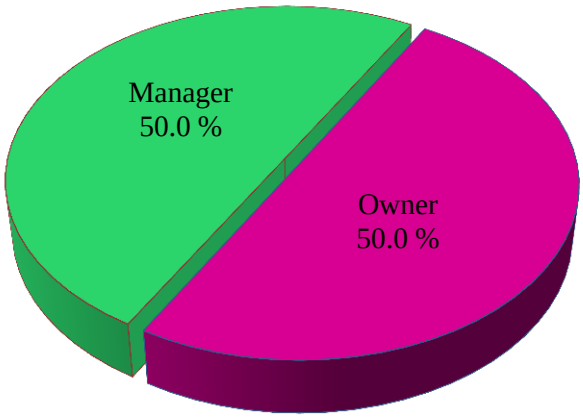


Table 5.8 shows the distribution information pertaining to the participants' gender. The gender differences of the sample suggest that the majority of the participants were female (62%). Male participants made up 38 percent of the sample. The participants' current position in the organisation is reported on in Table 5.9.

Table 5.9 Current position in the organisation

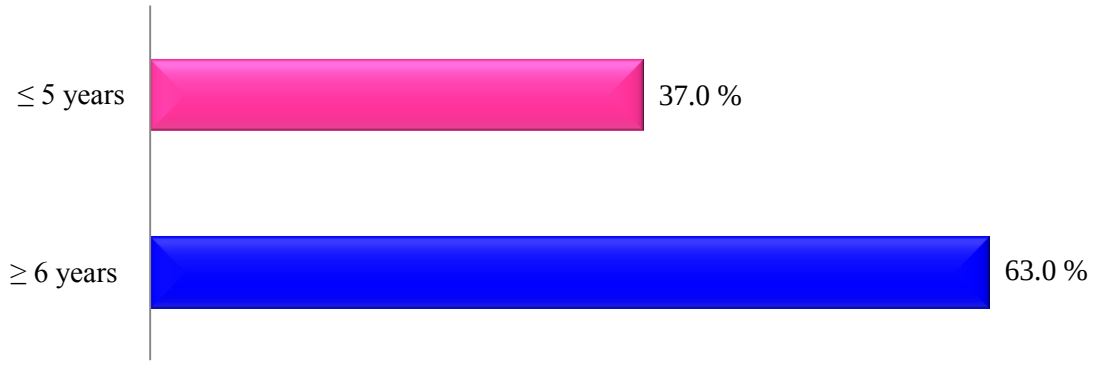
	Frequency *f*	Percentage %
Owner	54	50
Manager	54	50
N	108	100.0



Current position in the organisation was used as a screening question to ensure that all the information used in this study are from participants that are either the owner or manager of the organisation, as they are knowledgeable of the organisation's operations. An equal percentage of owners and managers responses were received, indicating 50 percent each. Table 5.10 reports on the organisations' age.

Table 5.10 Organisations' age distribution

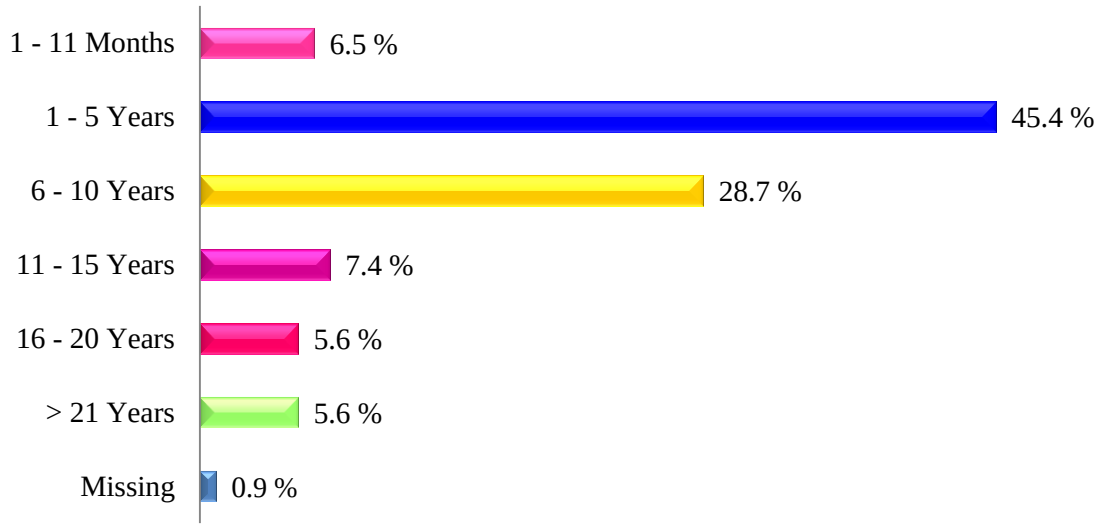
	Frequency *f*	Percentage %
Younger than 5 years	40	37.0
Over 6 years old	68	63.0
N	108	100.0



As presented in Table 5.10, the majority of the participants indicated their SSOs (63%) to be in operation for over six years, followed by those who indicated that their SSOs (37%) have been in operation for less than five years. As such, SSOs who had been in operation for more than six years were almost double the SSOs that had been in operation for less than five years. For classification purposes, according to the literature discussed in Chapter 2 (refer to Section 2.8), SSOs who have been in operation for less than five years are referred to as young organisations, whereas SSOs who have been in operation for more than six years are referred to as mature organisations.

Table 5.11 Years of ownership/management of the organisation

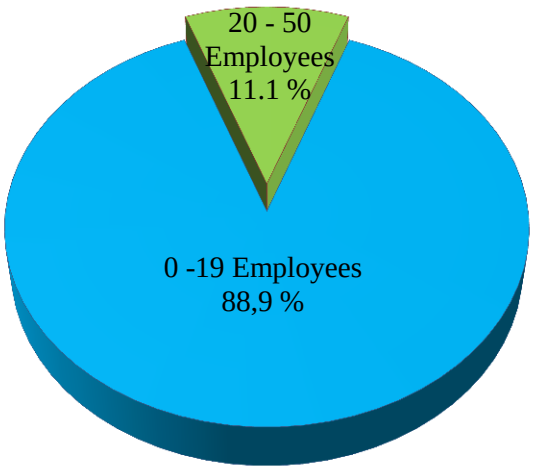
	Frequency *f*	Percentage %
1 – 11 Months	7	6.5
1 – 5 Years	49	45.4
6 – 10 Years	31	28.7
11 – 15 Years	8	7.4
16 – 20 Years	6	5.6
> 21 Years	6	5.6
Missing	1	0.9
N	108	100.0



Years of ownership/management of the organisation was included to estimate the experience of the SSO owner/ manager in relation to the particular organisation. According to Table 5.11, the majority of the participants (45.4%) indicated being the owner/manager of the organisation between one to five years, followed by those who indicated being the owner/manager between six to 10 years (28.7%), 11 to 15 years (7.4%) and less than one year (6.5%). At 5.6 percent, participants who have been the owner/manager for between 16 to 20 years and more than 21 years respectively represented the smallest portion of the sample. One participant failed to complete this question, signifying a missing value of 0.9 percent.

Table 5.12 Number of employees

	Frequency *f*	Percentage %
0 – 19 Employees	96	88.9
20 – 50 Employees	12	11.1
N	108	100.0



The number of employees employed by the participant's SSO was used as a screening question to ensure that all the information used in this study are from owners/managers of SSOs, as the nature of the research topic relates to SSOs in particular. As guided by the literature on SOs (refer to Section 2.10.1), all service organisations who employ less than 50 employees are deemed as a SSO, and as can be seen in Table 5.12, all the participants qualified to participate in the study. The majority of the participants indicated having less than 19 employees (88.9%) in the SSO, followed by those who indicated having between 20 and 50 employees (11.1%) in the SSO. Table 5.13 reports on the participants' highest qualification.

Table 5.13 Highest qualification

	Frequency *f*	Percentage %
Grade 12 / Matric	34	31.5
> Grade 12 / Matric	72	66.7
Missing	2	1.9
N	108	100.0

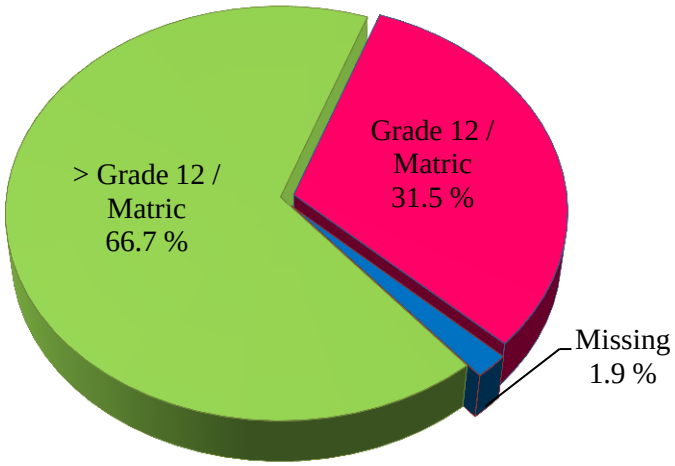
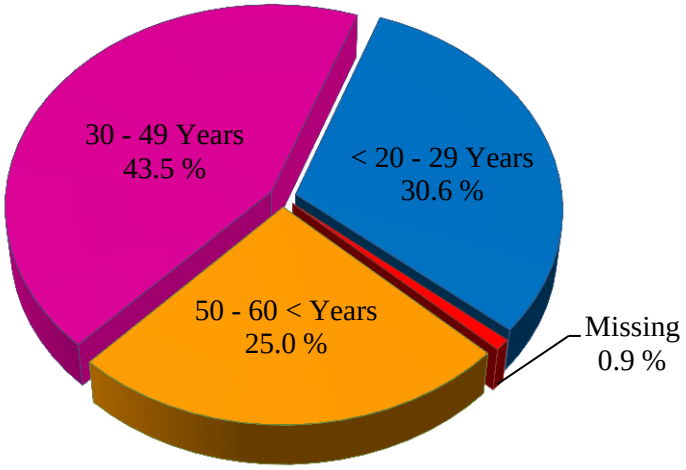


Table 5.13 provides an outline of the participants' highest qualification. This question was divided into two categories, namely the SSO owners/managers who have a grade 12 or matric, and those who have a qualification higher than matric. As illustrated, 66.7 percent of the SSO owners/managers have a qualification higher than matric, followed by those who identified having passed matric (31.5%). Two of the participants did not provide answers to this question, indicating a missing 1.9 percent.

Table 5.14 Participants' age distribution

	Frequency *f*	Percentage %
< 20 – 29 Years	33	30.6
30 – 49 Years	47	43.5
50 – 60 < Years	27	25.0
Missing	1	0.9
N	108	100.0



As illustrated in Table 5.14, the sample included participants from various age groups. The majority of the participants are between 30 and 49 years old (43.5%). Those participants who indicated being younger than 20 or between 20 and 29 years old (30.6%) were grouped together. Similarly, the participants who indicated being between 50 and 60 years old, and older than 50, were grouped together and represented the smallest portion of the sample, at 25 percent. The missing percentage of 0.9 represents the missing category.

The above section has provided the participants demographical information. The following section describes the reliability and validity of the scale applied in the main survey questionnaire utilised in this study.

5.6 RELIABILITY AND VALIDITY OF THE SCALE

Whilst reliability is achieved when relationships are found on the same concept using two or more similar measures on the particular concept (Iacobucci & Churchill, 2010:258), validity measures are undertaken to ensure that a construct is measuring what it is proposed to measure (Wiid & Diggines, 2013:241). In order to ensure reliability and validity of the research instrument, the Cronbach alpha values and inter-item correlations of the UBI services scale in Section B of the questionnaire was employed. Table 5.15 provides a summary of the Cronbach alpha coefficient values and inter-item correlations per construct.

Table 5.15 Reliability and validity of main survey

Constructs	Number of items	Cronbach alpha	Average inter-item correlation
Scale B: UBI services scale	41	0.928	0.243
Construct 1 - Physical facilities	8	0.695	0.229
Construct 2 - General business services	7	0.688	0.242
Construct 3 - Management services	5	0.811	0.460
Construct 4 - Networking and professional services	7	0.832	0.410
Construct 5 – Financial consulting services	9	0.891	0.471
Construct 6 - University services	5	0.813	0.465

As shown in Table 5.15, the Likert scale for Section B pertaining to the important UBI services returned a Cronbach alpha value of 0.928 for the entire scale. The Cronbach alpha values produced per UBI service construct ranged from 0.688 to 0.891. Wiid and Diggines (2013:238) indicate that a Cronbach alpha coefficient value between 0.600 and 0.800 is acceptable, whereas a value above 0.800 is considered good. As all of these values exceeded the acceptable level of 0.6 (Malhotra, 2010:39), this scale is deemed reliable.

In addition, the average inter-item correlation value was computed in order to establish internal reliability and construct validity. As shown in Table 5.15, an inter-item correlation value of 0.243 was calculated on the overall scale measuring the important UBI services. The average inter-item correlation values for the six constructs ranged from 0.229 to 0.471. The average inter-item correlation, determining the relationship between constructs, should be between 0.15 and 0.500 (Clark & Watson, 1995:316). Therefore, the average inter-item correlation for the overall scale and for the UBI service constructs was within the suggested value range. This infers that the research instrument employed in this study does measure the SSO owners/managers' perceptions of important UBI services.

The following section highlights the descriptive statistics computed in the main survey.

5.7 DESCRIPTIVE STATISTICS

Descriptive statistics are used commonly for summarising large sets of data in order to release some value out of the characteristics of the data (McDaniel & Gates, 2013:457). Pallant (2007:53) highlights that the mean, standard deviation, range of scores, skewness and kurtosis are common measures included in descriptive statistics. Table 5.16 presents the mean values, standard deviation, skewness and kurtosis for the 41 individual items of the scale and the six UBI service constructs. The number of questionnaires completed by the participants is shown as the Valid *N* in the table below. Given the six-point Likert scale, which ranged from very unimportant (1) to very important (6), higher mean values are associated with more perceived importance of UBI services amongst SSO owners/managers. Table 5.16 reports on the descriptive statistics pertaining to the important UBI services.

Table 5.16 Descriptive statistics

Item	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Construct 1: Physical facilities	108	4.418	0.806	-0.575	0.290
B1	108	5.620	1.117	-3.303	9.993
B2	108	5.454	1.233	-2.632	6.383
B3	108	3.176	1.766	0.402	-1.155
B4	108	2.417	1.541	1.049	0.157
B5	108	5.009	1.398	-1.566	1.665
B6	108	4.963	1.339	-1.216	0.681
B7	108	5.111	1.278	-1.691	2.314
B8	108	3.593	1.624	-0.129	-1.132
Construct 2: General business services	108	4.431	0.976	-0.655	0.217
B9	108	4.491	1.801	-.0875	-0.655
B10	108	5.028	1.603	-1.641	1.377
B11	108	4.343	1.560	-0.710	-0.488
B12	108	4.574	1.752	0.917	-0.601
B13	108	4.083	1.613	-0.424	-0.973
B14	108	4.204	1.639	-0.542	-0.862
B15	108	4.296	1.602	-0.692	-0.580
Construct 3: Management services	108	4.502	1.086	-0.857	0.509
B16	108	4.444	1.494	-0.800	-0.245
B17	108	5.157	1.262	-1.697	2.348
B18	108	4.593	1.312	0.775	0.055
B19	108	4.046	1.417	-0.565	-0.428
B20	108	4.269	1.678	-0.628	-0.800

Table 5.16 Descriptive statistics (continued…)

Item	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Construct 4: Networking and professional services	108	4.530	1.027	-0.490	-0.206
B21	108	4.583	1.529	-0.959	0.088
B22	108	4.509	1.437	0.952	0.248
B23	108	4.148	1.611	-0.437	-0.906
B24	108	4.315	1.581	-0.578	-0.691
B25	108	3.824	1.593	-0.214	-1.000
B26	108	5.398	1.076	-2.414	6.437
B27	108	4.935	1.270	-1.522	2.296
Construct 5: Financial consulting services	108	3.950	1.134	-0.497	0.001
B28	108	5.167	1.301	-1.874	3.085
B29	108	4.093	1.598	-0.490	-0.789
B30	108	3.250	1.630	0.035	-1.170
B31	108	2.935	1.524	0.256	-0.991
B32	108	3.148	1.707	0.305	-1.130
B33	108	3.537	1.614	-0.163	-0.959
B34	108	4.759	1.380	-1.121	0.733
B35	108	4.157	1.595	-0.629	-0.603
B36	108	4.500	1.559	-0.941	-0.072

Table 5.16 Descriptive statistics (continued…)

Item	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Construct 6: University services	108	3.406	1.221	-0.049	-0.577
B37	108	3.333	1.646	0.038	-1.133
B38	108	2.944	1.490	0.511	-0.664
B39	108	2.630	1.574	0.752	-0.517
B40	108	3.991	1.727	-0.418	-1.072
B41	108	4.130	1.624	-0.560	-0.832

As presented in Table 5.16, means above three were computed for all of the UBI services. This suggests that physical facilities, general business services, management services, networking and professional services, financial consulting services and university services are all perceived as important services that SSOs require from a UBI. In terms of the relative importance of these UBI services required by SSOs, the networking and professional services had the highest mean value (mean = 4.530), followed by the management services (mean = 4.502), general business services (mean = 4.431) physical facilities (mean = 4.418) and financial consulting services (mean = 3.950). University services scored the lowest mean value (mean = 3.406) of all the UBI services.

The highest standard deviation occurred on the perceived importance of university services as important UBI services (Std. Dev = 1.22), indicating a greater dispersion in responses to items in that construct. In order to determine whether the assumptions of normality were violated, the skewness and kurtosis values were considered. From Table 5.16, it can be deduced that there is a negatively skewed symmetry of distribution as there is a greater number of negative skewness values for the items referring to the importance of UBI services. The kurtosis values, which represent the peakedness of the distribution, suggest that the data set is relatively flat.

After computing the descriptive statistics, the relationships between the constructs were assessed, as outlined in the following section.

5.8 CORRELATION ANALYSIS

Correlation analysis measures the relationship between two variables, to the extent that a change in one variable will have an effect on the other variable (McDaniel & Gates, 2013:526). Pearson's product-moment correlation coefficients between each pair of constructs were calculated in order to measure the relationships between the UBI service constructs. Table 5.17 presents this correlation matrix.

Table 5.17 Relationship between the constructs

	C1	C2	C3	C4	C5	C6
Physical facilities	1.00					
General business services	0.501**	1.00				
Management services	0.525**	0.613**	1.00			
Networking and professional services	0.630**	0.452**	0.647**	1.00		
Financial consulting services	0.347**	0.399**	0.445**	0.552**	1.00	
University services	0.310**	0.357**	0.441**	0.430**	0.470**	1.00

**Correlation is significant at the 0.01 level (2-tailed)

Table 5.17 shows that at $\alpha = 0.01$ significance level, there is a significant positive relationship between the UBI service constructs. According to Wiid and Diggines (2013:283), when the correlation coefficient (r) is equal to one ($r = 1$), it indicates that an increase in one variable causes an increase in the other. Significant positive relationships were found between the six UBI service constructs ($r = 1$). Pallant (2007:132) states that the correlation value for each construct represents the strength of the relationship, whereby a value between 0.10 and 0.29 indicate a small relationship strength, a value between 0.30 and 0.49 a medium relationship strength

and a value between 0.50 and 1.0 a large relationship strength. In this study, the largest relationship strength determined was between the networking and professional services construct, and the management services construct, with a correlation value of 0.647. However, the smallest relationship strength was between the university services and the physical facilities construct, representing a correlation value of 0.310. This suggests that, there is a potentially strong relationship between the UBI service constructs and, therefore, all of the services should be grouped together and are all relevant to UBIs.

5.9 EMPIRICAL OBJECTIVES

In order to achieve the empirical objectives and test the hypotheses set out in Chapter 1, one-sample t-tests, two independent-samples t-tests and one-way ANOVA tests were undertaken to identify whether differences exist in terms of the SSOs' characteristics and the participants' perceived importance of UBI services. In addition to the statistical tests used, frequencies and percentages represented in a histogram chart format and stack bar charts were also utilised.

Significance testing was utilised to determine whether there were any significant differences between the statements made for the hypotheses and the actual data results (Wiid & Diggines, 2013:259). The significance level was set at $\alpha = 0.05$ and the decision rule followed:

- If P-value > α, then conclude *Ho*
- If P-value ≤ α, then conclude *Ha*

Cohen's D calculations were computed to determine whether the statistically significant differences found also have practical significance. Pallant (2007:208) indicates that the calculation of Cohen's D involves computing effect sizes, whereby the following guidelines should be applied to the strength of effect sizes:

- $0.20 \leq d < 0.50$ – small effect, practically non-significant
- $0.50 \leq d < 0.80$ – medium effect, points towards being practically significant
- $0.80 \leq d$ – large effect and the results are practically significant.

The following section describes the empirical objectives set for this study as formulated in Chapter 1 (Section 1.3.3). The subsequent section comprises a discussion relating to the first empirical objective of this study.

5.9.1 Perceived importance of UBI services

For the purpose of addressing the first empirical objective of this study (refer to Section 1.3.3), a single-tailed, one-sample t-test was conducted to determine whether SSO owners/managers' perceived importance of UBI services are statistically significant. The expected mean was set at $X > 3$. The hypothesis (*Ho1*/*Ha1*) was formulated as follows:

Ho1: SSO owners/managers in the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) do not perceive physical facilities, general business services, management services, networking and professional services, financial consulting services and university services as important UBI services.

Ha1: SSO owners/managers in the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) perceive physical facilities, general business services, management services, networking and professional services, financial consulting services and university services as important UBI services.

Table 5.18 reports on the findings of the calculated t-values and p-values pertaining to the participants' perceived importance of the UBI services.

Table 5.18 Owners/managers' perceived importance of UBI services

Constructs	Mean	Standard deviation	t-statistic	p-value
Construct 1: Physical facilities	4.418	0.806	11.837	0.000*
B1	5.620	1.117	19.732	0.000*
B2	5.454	1.233	16.462	0.000*
B3	3.176	1.766	-1.907	0.059
B4	2.417	1.542	-7.304	0.000*
B5	5.009	1.398	11.223	0.000*
B6	4.963	1.339	11.354	0.000*
B7	5.111	1.277	13.105	0.000*
B8	3.593	1.624	0.593	0.555
Construct 2: General business services	4.431	0.976	9.914	0.000*
B9	4.491	1.801	5.717	0.000*
B10	5.028	1.603	9.905	0.000*
B11	4.343	1.560	5.614	0.000*
B12	4.574	1.752	6.371	0.000*
B13	4.083	1.613	3.759	0.000*
B14	4.204	1.639	4.461	0.000*
B15	4.296	1.602	5.166	0.000*
Construct 3: Management services	4.502	1.086	9.584	0.000*
B16	4.444	1.494	6.572	0.000*
B17	5.157	1.262	13.652	0.000*
B18	4.593	1.312	8.657	0.000*
B19	4.046	1.417	4.007	0.000*
B20	4.269	1.678	4.760	0.000*

Table 5.18 Owners/managers' perceived importance of UBI services (continued…)

Constructs	Mean	Standard deviation	t-statistic	p-value
Construct 4: Networking and professional services	4.530	1.027	10.432	0.000*
B21	4.583	1.529	7.362	0.000*
B22	4.509	1.437	7.298	0.000*
B23	4.148	1.611	4.182	0.000*
B24	4.315	1.581	5.358	0.000*
B25	3.824	1.593	2.114	0.037*
B26	5.398	1.076	18.333	0.000*
B27	4.935	1.270	11.754	0.000*
Construct 5: Financial consulting services	3.950	1.134	4.121	0.000*
B28	5.167	1.301	13.317	0.000*
B29	4.093	1.560	3.855	0.000*
B30	3.250	1.630	-1.594	0.114
B31	2.935	1.524	-3.851	0.000*
B32	3.148	1.707	-2.143	0.034*
B33	3.537	1.614	0.238	0.812
B34	4.759	1.380	9.484	0.000*
B35	4.157	1.595	4.282	0.000*
B36	4.500	1.556	6.680	0.000*
Construct 6: University services	3.406	1.221	-0.804	0.423
B37	3.333	1.646	-1.052	0.295
B38	2.944	1.490	-3.874	0.000*
B39	2.630	1.574	-5.746	0.000*

Table 5.18 Owners/managers' perceived importance of UBI services (continued…)

Constructs	Mean	Standard deviation	t-statistic	p-value
B40	3.991	1.727	2.954	0.004*
B41	4.130	1.624	4.029	0.000*

* significant at the 0.05 level

From Table 5.18 it can be seen that p-values of $p < 0.05$ were calculated on the participants' perceived importance of physical facilities (Construct 1), general business services (Construct 2), management services (Construct 3), networking and professional services (Construct 4) and financial consulting services (Construct 5). Therefore, for these constructs, *Ho1* is rejected and *Ha1* concluded, as the P-values lend support to *Ha1*. This suggests that SSO owners/managers' perceive these services as important UBI services for SSOs. University services (Construct 6) are non-significant, with a p-value of $0.423 > 0.05$. Therefore, for this construct there was a failure to reject the null hypotheses, *Ho1,* due to the p-value that lends support to *Ho1*. This suggests that SSO owners/managers' perceive university services as the least important UBI service for SSOs. It should be noted that, when considering the services pertaining to the university services construct (Construct 6), student employees (Item B37) ($p = 0.295>0.05$), was the only university service that was not perceived as an important UBI service for SSOs, where all the other university services were statistically significant.

5.9.2 Perceived importance of UBI services between young and mature SSOs

For the purpose of addressing the second empirical objective of this study (refer to Section 1.3.3), two independent-samples t-tests were utilised to determine whether the age of the SSO showed any differences with regard to the perceived importance of UBI service required. The data for the age of the SSO were divided into two sections, namely one for young SSOs that have been in operation for less than five years and the other for mature SSOs that have been in operation for more than six years. The hypothesis (*Ho2*/*Ha2*) was formulated as follows:

Ho2: There is no significant difference between young SSOs and mature SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceived importance of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ha2: There is a significant difference between young SSOs and mature SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceived importance of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Table 5.19 reports on the means, standard deviations, t-statistics and p-values pertaining to young and mature SSOs owners/managers' perceived importance of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Table 5.19 Owners/managers' perceived importance of UBI services for young and mature SSOs

	Young SSOs		**Mature SSOs**				
Constructs	**Mean N = 40**	**Std. Dev. N = 40**	**Mean N = 68**	**Std. Dev. N = 68**	**t-value**	**p-value**	**Cohen's D**
Physical facilities	4.566	0.826	4.331	0.787	1.470	0.145	N/A
General business services	4.661	0.905	4.296	0.998	1.896	0.061	N/A
Management services	4.925	0.853	4.253	1.136	3.239	0.002*	0.60***
Networking and professional services	4.771	0.848	4.389	1.010	1.894	0.061	N/A

Table 5.19 Owners/managers' perceived importance of UBI services for young and mature SSOs (continued…)

	Young SSOs		Mature SSOs				
Constructs	**Mean N = 40**	**Std. Dev. N = 40**	**Mean N = 68**	**Std. Dev. N = 68**	**t-value**	**p-value**	**Cohen's D**
Financial consulting services	4.164	0.859	3.824	1.257	1.516	0.133	N/A
University services	3.695	1.135	3.235	1.245	1.914	0.058	N/A

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

N/A Cohen's d-statistic not calculated as the difference was not statistically significant

Table 5.19 indicates a p-value of $p = 0.000<0.05$ was calculated on the constructs between the owners/managers of young and mature SSOs' perceptions of management services as important UBI services. Therefore, for this construct the null hypothesis, *Ho2*, is rejected and the alternative, *Ha2*, is concluded. This suggests that the age of the SSO has a significant influence on owners/managers' perceived importance of UBI services. Owners/managers of young and mature SSOs appear to have statistically significant different perceptions of management services as important UBI services. The owners/managers of SSOs that have been in operation for less than five years perceived management services to be more important UBI services than owners/managers of SSOs that have been in operation for more than six years.

Cohen's D value was calculated to determine the practically significant influence found between owners/managers of young and mature Vaal Triangle based SSOs' perceived importance of UBI services. These results are presented in Table 5.19. The Cohen D value computed for the perceived importance of UBI services between owners/managers of young and mature SSOs was 0.60, indicating medium practical effect.

5.9.3 Perceived importance of UBI services between service industry sectors

For the purpose of addressing the third empirical objective of this study (refer to Section 1.3.3), one-way ANOVA was utilised to determine whether there is a significant difference between the owners/managers' perceived importance of UBI services among the owners/managers of SSOs from the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors. The hypothesis (*Ho3*/*Ha3*) was stated as follows:

Ho3: There is no significant difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ha3: There is a significant difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Table 5.20 provides an overview of the results regarding the statistical differences between the perceived importance of UBI services among the owners/managers of SSOs amongst different service industry sectors.

Table 5.20 Difference between service industry sectors on importance of UBI services

Construct		Sum of Squares	df	Mean Square	F-ratio	Sig
Physical facilities	Between Groups	10.485	4	2.621	4.577	0.002*
	Within Groups	58.988	103	0.573		
	Total	69.474	107			
General business services	Between Groups	3.084	4	0.771	0.803	0.526
	Within Groups	98.875	103	0.960		
	Total	101.958	107			
Management services	Between Groups	2.230	4	0.557	0.463	0.763
	Within Groups	124.050	103	1.204		
	Total	126.280	107			
Networking and professional services	Between Groups	18.846	4	4.711	5.168	0.001*
	Within Groups	93.891	103	0.912		
	Total	112.737	107			
Financial consulting services	Between Groups	10.543	4	2.636	2.138	0.081
	Within Groups	126.973	103	1.233		
	Total	137.516	107			
University services	Between Groups	5.460	4	1.365	0.913	0.459
	Within Groups	153.937	103	1.495		
	Total	159.397	107			

* Significant at $p < 0.05$

As illustrated in Table 5.20, statistically significant differences were established between owners/managers' perceptions towards the important UBI services pertaining to physical facilities, and networking and professional services, and the type of service industry sector ($p < 0.05$). As such, for these two constructs and type of service industry sector, the null hypothesis, *Ho3*, is rejected and the alternative, *Ha3*, concluded. This suggests that there are significant differences between the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services pertaining to physical facilities and

networking and professional services ($p = 0.002$, $0.001 < 0.05$). For the remaining constructs, the null hypothesis, *Ho3*, cannot be rejected at the 0.05 significance level. This suggest that there is no significant difference between the auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional service industry sectors owners/managers' perceptions towards the important UBI services pertaining to management services, general business services, university services and financial consulting services ($p = 0.763$, 0.526, 0.459, 0.081, > 0.05). The statistical differences found between owners/managers' perceptions towards the importance of physical facilities and networking and professional services as important UBI services for SSOs and type of service industry sector were investigated further with a Tukey HSD test, with the purpose of determining where the specific variances lay.

The Tukey HSD test (Annexure C) indicates that in the case of the type of service industry sector's effect on owners/managers' perceptions towards the importance of physical facilities and networking and professional services as important UBI services for SSOs scores, statistically significant differences were found between estate agents and property management service industry sectors with significance values of $p < 0.05$. This indicates that there are differences in the perceived importance of UBI services, with estate agents and property management accounting for the majority of the variances between the physical facilities and networking and professional services. This may be attributed to the estate agents and property management service industry sector requiring more structured services relating to physical facilities and networking and professional services, when compared to the other service industry sectors. This is expectable given that individuals in this sector rely on networking to generate sales as well as leads. Furthermore, such individuals are more likely to require the services of people such as accountants and lawyers on a regular basis in order to complete transactions.

5.9.4 Perceived importance of UBI services during the business life-cycle phases

For the purpose of addressing the fourth empirical objective of this study (refer to Section 1.3.3), a stack bar chart was utilised. The objective aimed to determine at what phase of the business life cycle, namely pre-start-up, start-up, growth and

maturity, the SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors perceive the UBI services to be important.

The results of the SSO owners/managers' perceptions are illustrated in Figure 5.1. For each UBI service construct, the SSO owners/manager had an option to select between the pre-start-up phase, start-up phase, growth or maturity where either one, or more of the phases could have been selected, depending on the requirements of the SSO at the current life-cycle phase. In addition to the four business life-cycle phases, a not applicable option was included.

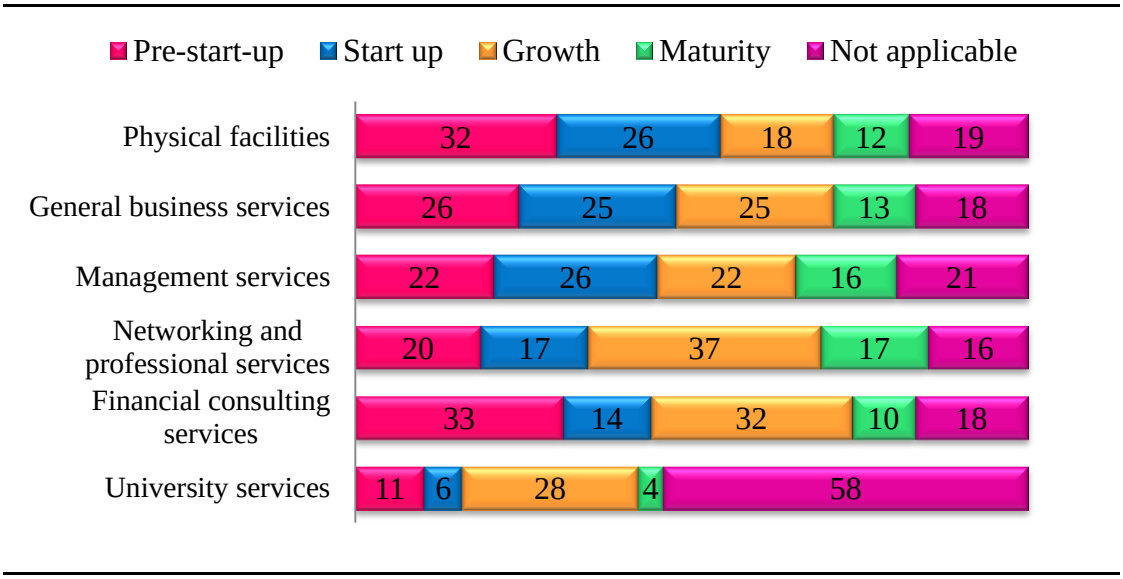


Figure 5.1 Owners/managers' perceived importance of UBI services during the business life cycle phases

As illustrated in Figure 5.1, physical facilities (Construct 1) was mostly required in the pre-start-up phase, as perceived by 32 of the SSO owners/managers, which was followed by the UBI service constructs being required in the start-up phase. For general business services (Construct 2) and management services (Construct 3), the SSO owners/managers' perceived that the UBI services of these constructs were mostly required in the pre-start-up, start-up and growth phases where the responses to these three phases were very close to being equal for both UBI service constructs. However, the SSO owners/managers' perceived the importance of networking and professional services (Construct 4) to be most important during the growth phase. For financial consulting services (Construct 5), the SSO owners/managers' perceptions

showed that the UBI services were mostly required during the pre-start-up and growth phases. Lastly, the majority of SSO owners/managers' perceived that the UBI services for university services (Construct 6) were not applicable to their organisations, which is in accordance to the importance of this construct as determined in Section 5.9.1.

5.9.5 Perceived importance of the value of UBI services

For the purpose of addressing the fifth empirical objective of this study (refer to Section 1.3.3), a histogram was utilised. This objective aimed to determine the SSO owners/managers' perceived importance of UBI services amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors. In order to derive value of UBI services, three dichotomous questions were asked, namely if the SSO owners/managers presumed that the UBI services would have made a difference to the past and current business operations of their organisations and if they would be currently interested in utilising the services of a UBI for their organisations. The results are presented in Figure 5.2.

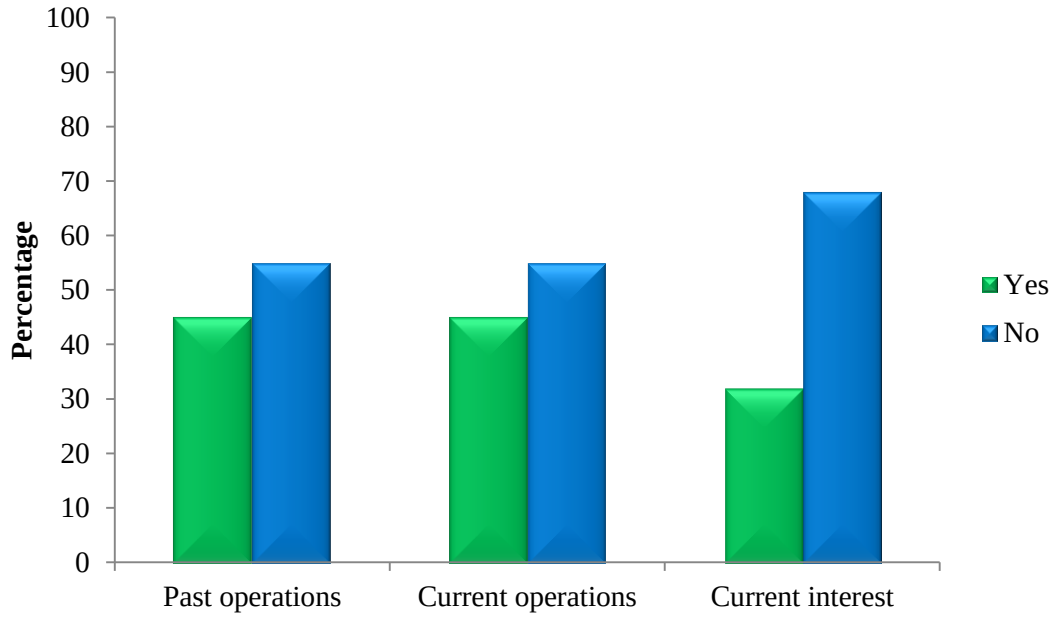


Figure 5.2 Owners/managers' perceived value of UBI services

Figure 5.2 illustrates that the same results were obtained for the SSO owners/managers who presumed that the services would have made a difference to

their past business operations as well as to their current business operations. In both instances, 45 percent of SSO owners presumed that the UBI services would have made a difference to the past and current business operations of their organisation as opposed to 55 percent that presumed the UBI services would not have made a difference to their past and current business operations. However, it is important to note that even though the greater percentage of responses were obtained from the SSO owners/managers who presumed that the UBI would not have made a difference to their past and current business operations, these percentages are still very close to one another. Therefore, this suggests that the UBI services do have value to the SSOs owners/managers. As opposed to the SSO owners/managers' presumptions of the UBI services making a difference to their past and current business operations, 32 percent of the SSO owners/managers were currently interested in utilising the UBI services and 68 percent were not currently interested in utilising the UBI services for their organisation. Thus, when considering the SSO owners/managers current interest in the UBI services, it becomes apparent that the SSO owners/managers do not perceive UBI services to be valuable.

The above section explained the empirical objectives of this study, as determined in Chapter 1, and the various techniques used to achieve these empirical objectives. Further statistical tests were conducted for any possible differences between the perceived importance of the six UBI service constructs and the SSOs number of employees, the SSOs owners/managers qualifications and gender. These results indicated that there were no statistically significant differences and, therefore, are not reported on. The following section explains the cluster analysis conducted for this study.

5.10 CLUSTER ANALYSIS

Cluster analysis is a set of techniques used to organise objects or cases into homogeneous groups, known as clusters (Malhotra, 2010:662). According to Wiid and Diggines (2013:290), cluster analysis separates objects or individuals into a smaller number of groups, whereby high internal homogeneity can be found within each cluster and adversely, high external heterogeneity can be found between the clusters. As such, the objects or individuals utilised for the cluster analysis should

contain high levels of similarities within the groups and dissimilarities between the groups.

For the purpose of addressing the sixth empirical objective of this study, formulated in Chapter 1 (refer to Section 1.3.3), cluster analysis was conducted in order to determine whether similarities could be found between the participants and the perceived importance of UBI services constructs, namely physical facilities, general business services, management services, networking and professional services, financial consulting services and university services. Specifically, a hierarchical clustering technique was employed through agglomerative clustering using Ward's method.

The cluster analysis revealed that two clusters were identified from the six UBI service constructs that were utilised to group participants based on the similarities within their responses. These clusters will be referred to as Cluster 1 and Cluster 2. Figure 5.3 illustrates the mean scores per construct for Cluster 1 and Cluster 2.

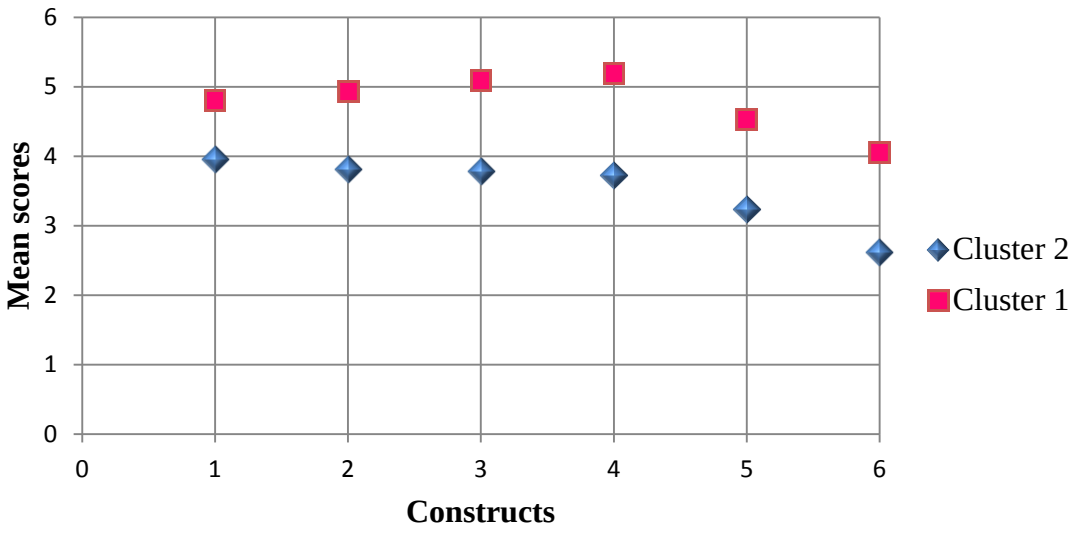


Figure 5.3 Mean scores for Cluster 1 and Cluster 2

The participants were requested to indicate how important the UBI services listed were to their organisations on a six-point Likert scale, ranging from 1 = very unimportant to 6 = very important. It is evident that from the mean scores depicted in Figure 5.3, the participants in Cluster 1 viewed the UBI services as more important than those from Cluster 2 did. Cluster 1 mean scores were all above four, whereby

four on the Likert scale represented the UBI service listed to be somewhat important. For Cluster 1, the responses ranged between somewhat important and very important with the highest mean score recorded for networking and professional services (mean = 5.199), followed by management services (mean = 5.098), general business services (mean = 4.942), physical facilities (mean = 4.537) and university services (mean = 4.058). In contrast, for Cluster 2 the participants rated the importance of UBI services below four, indicating on the Likert scale that the UBI services were somewhat unimportant to very unimportant to the participants with the highest mean score recorded for physical facilities (mean = 3.957), followed by general business services (mean = 3.816), management services (mean = 3.784), networking and professional services (mean = 3.726), financial consulting services (mean = 3.243) and university services (mean = 2.620).

5.10.1 Validating Cluster 1 and Cluster 2 by comparisons between importance of UBI services

In order to validate Cluster 1 and Cluster 2, one-way ANOVA tests for statistically significant differences were conducted between the clusters (Cluster 1 and Cluster 2) and the six UBI service constructs (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services). The hypothesis (*Ho4*/*Ha4*) was stated as follows:

Ho4: There is no significant difference between the clusters (Cluster 1 and Cluster 2) and the perceived importance of the UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Ha4: There is a significant difference between the clusters (Cluster 1 and Cluster 2) and the perceived importance of the UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services, and university services).

Table 5.21 reports the results of the one-way ANOVA for comparisons between the clusters and the UBI service constructs.

Table 5.21 Comparisons between clusters and importance of UBI services

Construct		Sum of Squares	df	Mean Square	F-ratio	Sig
Physical facilities	Between Groups	19.078	1	19.078	40.127	0.000*
	Within Groups	50.396	106	0.475		
	Total	69.474	107			
General business services	Between Groups	33.913	1	33.913	52.829	0.000*
	Within Groups	68.046	106	0.642		
	Total	101.958	107			
Management services	Between Groups	46.263	1	46.263	61.285	0.000*
	Within Groups	80.017	106	0.755		
	Total	126.280	107			
Networking and professional services	Between Groups	58.049	1	58.049	112.514	0.000*
	Within Groups	54.688	106	0.516		
	Total	112.737	107			
Financial consulting services	Between Groups	44.829	1	44.829	51.267	0.000*
	Within Groups	92.687	106	0.874		
	Total	137.516	107			
University services	Between Groups	55.293	1	55.293	56.300	0.000*
	Within Groups	104.104	106	0.982		
	Total	159.397	107			

* Significant at $p < 0.05$

As illustrated in Table 5.21, statistically significant differences were established for Cluster 1 and Cluster 2 and the owners/managers' perceived importance of the six UBI service constructs, namely physical facilities, general business services, management services, networking and professional services, financial consulting services and university services ($p = 0.000 < 0.05$). Therefore, *Ho4* is rejected and the alternative, *Ha4*, concluded, as the P-values lend support to *Ha4* and statistically

significant differences were established between Cluster 1 and Cluster 2 and the owners/managers' perceived importance of the six UBI service constructs.

The above sections have concentrated on indicating the clusters developed between the participants and the UBI service constructs, and validating the clusters by the UBI service constructs. However, further validation can be conducted by using demographical information. The following section highlights the statistically significant differences, if any, between the clusters and demographical information.

5.10.2 Testing for differences between Cluster 1 and Cluster 2 demographical information

A cross-comparison was conducted between the clusters (Cluster 1 and Cluster 2) and the demographical information. The demographical information used in the cross-comparisons refers to the type of industry, current position in the company, year the organisation was started, years of ownership/management at the organisation, number of employees, owner/manager qualification, owner/manager age and gender. Mann-Whitney U-tests were utilised as a non-parametric measure for the cross-comparisons between the clusters and demographical information. Table 5.22 presents the information pertaining to the Mann-Whitney U-tests executed for the cross-comparisons between the clusters and demographical information.

Table 5.22 Cross-comparisons between clusters and demographical information

Demographical information	Cluster	N	Mean rank	Mann-Whitney U	Wilcoxon W	Z	p
Service industry sector	1	59	50.21	1192.5	2962.5	-1.594	0.111
	2	49	59.66				
Current position in the organisation	1	59	58.62	1202.5	2427.5	-1.731	0.083
	2	49	49.54				

Table 5.22 Cross-comparisons between clusters and demographical information (continued…)

Demographical information	Cluster	N	Mean rank	Mann-Whitney U	Wilcoxon W	Z	p
Organisation's age	1	59	47.96	1059.5	2829.5	-2.848	0.004*
	2	49	62.38				
Years of ownership / management at the organisation	1	59	57.88	1196.0	2421.0	-1.411	0.158
	2	49	49.41				
Number of employees	1	59	56.24	1343.0	2568.0	-1.122	0.262
	2	49	52.41				
Owner / manager highest qualification	1	59	58.69	1198.5	2423.5	-1.895	0.058
	2	49	49.46				
Owner / manager Age	1	59	51.45	1273.0	2984.0	-0.992	0.321
	2	49	57.02				
Gender profile	1	59	61.27	1046.0	2271.0	-2.933	0.003*
	2	49	46.35				

* Significant at $p < 0.05$

As represented in Table 5.22, it is evident that only the organisation's age ($p = 0.004<0.05$) and gender ($p = 0.003<0.05$) are statistically significant. A deeper insight to the frequencies per cluster is required to explain further the difference between the clusters and demographical information. The following section provides a description of the clusters according to the frequencies per cluster.

5.10.3 Description of Cluster 1 and Cluster 2

A description of Cluster 1 and Cluster 2 is necessary to provide comparisons between the frequencies per demographical information between the clusters. However, it should be noted that even though there are differences between the demographical

information frequencies for Cluster 1 and Cluster 2, the largest difference between the two clusters is that Cluster 1 contains participants that considered the UBI services to be more important than the participants in Cluster 2. Table 5.23 provides a comparative view on the demographical information frequencies for Cluster 1 and Cluster 2.

Table 5.23 Demographical frequencies for Cluster 1 and Cluster 2

		Cluster 1 (N = 59)	**Cluster 2 (N = 49)**
		Frequency	**Frequency**
Type of industry:	Auto	8	13
	Estate agents and property management	20	1
	Health care and beauty	13	9
	Hospitality and accommodation	9	11
	Professional	9	15
Position in company:	Owner	25	29
	Manager	34	20
Organisation's age:	≤ 5 years	29	11
	≥ 6 years	30	38
Years of ownership / management:	1 – 11 months	3	4
	1 – 5 years	31	18
	6 – 10 years	17	14
	11 – 15 years	1	7
	16 – 20 years	3	3
	> 21 years	3	3
Number of employees:	0 – 19 employees	50	45
	20 – 50 employees	9	4
Qualification:	Grade 12 / matric	14	20
	> Grade 12 / matric	45	29

Table 5.23 Demographical frequencies for Cluster 1 and Cluster 2 (continued…)

		Cluster 1 (N = 59)	Cluster 2 (N = 49)
		Frequency	**Frequency**
Age:	< 20 – 29 years	21	12
	30 – 40 years	23	24
	50 – 60 years	14	13
Gender:	Male	15	26
	Female	44	23

In the section above, whereby Cluster 1 and Cluster 2 was validated by cross-comparisons of demographical information, it was identified that there were statistically significant differences between the clusters concerning the age of the organisation and SSO owners/managers gender. Table 5.23 illustrates that Cluster 1 contains a greater number of organisations that have been in operation for five years or less, representing young SSOs, whereas Cluster 2 contains the majority of organisations that have been in operation for six years or more, representing mature SSOs. Moreover, Cluster 1 contains more female participants than Cluster 2 and adversely, Cluster 2 contains more male participants in comparison to Cluster 1. Therefore, young SSOs and female SSO owners/managers' perceive the UBI services as more important than what the mature SSOs, and male SSO owners/managers did.

The above section has focused on describing the methods of cluster analysis utilised in the study, whereby two clusters were found, namely Cluster 1 and Cluster 2. These two clusters were validated by comparisons between the importance of UBI service constructs and cross-comparisons on demographical information. Also, a complete description of these clusters has been provided on the frequencies of demographical information per cluster.

5.11 CONCLUSION

The empirical findings of this study were presented in this chapter. Correlation analysis determined that there were relationships between the UBI service constructs,

thus suggesting that the UBI services should be grouped together. The empirical objectives, as formulated in Chapter 1, were conducted through the utilisation of one-sample t-tests, two independent-samples t-tests and one-way ANOVA tests. Moreover, frequencies and percentages in the form of pie charts and histogram charts were utilised for the empirical objectives that did not require statistical tests. The results of the empirical objectives revealed that the SSO owners/managers' perceive the UBI services as important, with networking and professional services as the most important, followed by management services, general business services, physical facilities, financial consulting services and university services. Interestingly, the young SSOs have higher perceptions with regards to the UBI services importance, in comparison to mature SSOs. This is especially true for the management services offered by UBIs, as statistically significant differences were established when the young and mature organisations were compared. Furthermore, there were not major differences found between the service industry sectors and the importance of UBI services constructs. The estate agents and property management service sector differed from the auto, health care and beauty, and professional service industry sectors, but only in relation to the physical facilities, and networking and professional service constructs. When examining the importance of the UBI services over the business life-cycle phases of SSOs, it became apparent that physical facilities, general business services, management services, networking and professional services, and financial consulting services offered by a UBI were mostly required during the SSOs pre-start-up, start-up and growth phases. However, the SSO owners/managers' perceived the university services offered by a UBI as inapplicable to their organisations. The conclusions drawn from the value of UBI services suggest that SSO owners/managers' perceive that the UBI service would have made differences to their past and current business operations. However, when considering the SSO owners/managers interest in utilising the UBI services, it became apparent that the UBI services are not valuable to the SSO owners/managers.

The final section of this chapter provided a complete description of the cluster analysis conducted for data sets evaluated for the main survey questionnaire. The cluster analysis conducted revealed that two clusters were formed, namely Cluster 1 and Cluster 2. The mean score produced by the UBI service constructs per cluster were provided. The major difference identified between these clusters indicates that

the participants of Cluster 1 perceived the UBI services to be more important than the participants in Cluster 2 did. Moreover, these clusters were validated by comparisons between the UBI service constructs and cross-comparisons between the demographical information. The final stage of the cluster analysis provided a description of each cluster, according to the frequencies of demographical information.

The following chapter, Chapter 6, concludes the study by providing a holistic view. This will be outlined in the contributions of the study, recommendations emanating from the analysis and interpretation of empirical findings described in this chapter as well as the limitations and opportunities for future research.

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The South African economy has witnessed an increase in the establishment of SOs, primarily as a need to create employment opportunities and possibly increase the welfare of the community. However, as highlighted in Chapter 1, these SOs are faced with numerous challenges relating to the lack of managerial capabilities, lack of access to finance and increasing competition, amongst others. As a result, these SOs are struggling to survive in the market and as such, the economy is currently witnessing more SOs ending their operations than gaining sustainability. Business incubators, which have proved to be successful worldwide, have been introduced recently to South Africa's markets to assist SOs in the development of their organisations. Business incubators aim to provide SOs with an array of services within a protected environment, until they become affluent organisations that are capable of independence and survivability. The services offered by an incubator range from physical facilities, such as basic access to telephone equipment, to more advanced services, such as business plan development, networking and financial management. Through these incubator service offerings being offered at minimal rates and on a shared basis, SOs are able to recuperate some of their overhead costs during their infant business period, when it is deemed most relevant to ensure survivability.

In order for incubators to be successful, their service offerings should be tailored to meet the real needs of SOs. This emanates from the problem statement established in Chapter 1 of this study. Incubators need to identify which of their services are most essential to the operations of SOs within the South African economy so that they can focus their limited resources on providing the most important services as identified by the SOs. However, this study examined the particular essential services relevant to UBIs, who offer general business services together with university-specific services. Moreover, this study only analysed the UBI service needs of SSOs. As such, the primary objective of this study was to determine the essential incubator services that SSOs require from a UBI in order to guide the formation of policy objectives,

marketing strategies and marketing procedures.

The purpose of this chapter is to provide an overview of the study (Section 6.2), highlight the main findings of this study (Section 6.3) and draw recommendations based on the literature reviews conducted and the results of the empirical objectives (Section 6.4). Moreover, this chapter also provides insights into the contributions of this study (Section 6.5) and the limitations and future research opportunities (Section 6.6). The concluding remarks for this study are provided in Section 6.7.

6.2 OVERVIEW OF THE STUDY

The previous five chapters have contributed to concluding upon the final recommendations developed for this study, delineating the need for an overview of these chapters. The purpose of Chapter 1 was to introduce the study and outline the problem statement, which shaped the purpose of this study. Together with this, the primary, theoretical and empirical objectives were formulated in Chapter 1 (Section 1.3), to accomplish the purpose of the study in accordance with the problem statement. Section 6.2.1 reviews the primary objective, Section 6.2.2 the theoretical objectives and Section 6.2.3 the empirical objectives of the study.

6.2.1 Primary objective

The primary objective of this study was to determine the essential incubator services that SSOs require from a UBI in order to guide the formation of policy objectives, marketing strategies and marketing procedures.

6.2.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Review the literature on the fundamental business management functions
- Outline the importance of entrepreneurship
- Review the literature on the characteristics of SOs
- Conduct a review on business incubators and UBIs

- Conduct a review on UBI services
- Conduct a review on marketing

6.2.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Determine the perceived importance ranking of UBI services (physical facilities, general business services, management services, networking and professional services, financial consulting services and university services) amongst SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.
- Determine whether there is a difference regarding the owners/managers' perceived importance of UBI services required between SSOs that have been in operation for five years or less and those that have been in operation for more than six years.
- Determine whether there is a difference between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceptions towards the importance of UBI services required.
- Determine at what phase of the business life cycle, namely pre-start-up, start-up, growth or maturity, the SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors perceive the UBI services to be important.
- Determine the SSO owners/managers' perceived value of UBI services amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.
- Formulate participant groups based on agreement of the perceived importance of services required from a UBI amongst SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors.

Steered by the first three theoretical objectives, Chapter 2, focused on the literature

pertaining to the topic of business management for entrepreneurs. In order to provide a comprehensive discussion on the business management functions (Section 2.5), addressing the first theoretical objective, an overview of business management was provided (Section 2.2), together with the business environment (Section 2.3) and the general management principles (Section 2.4). In order to address the second theoretical objectives, an overview of entrepreneurship was introduced (Section 2.6), defining entrepreneurship, highlighting its importance, identifying the types of entrepreneurial organisations and defining entrepreneurs as an inseparable element to entrepreneurship. Further insights to entrepreneurship were provided through outlining the entrepreneurial process (Section 2.7), the entrepreneurial life cycle (Section 2.8) and the business plan (Section 2.9). The relation between entrepreneurship and the management of SOs, addressing the third theoretical objectives of this study, determined the need for a full discussion on SOs (Section 2.10). This section concentrated on defining the SO, its importance, management principles, challenges and support structures.

Within Chapter 3, the remaining three theoretical objectives are addressed. The fourth theoretical objective addresses business incubators and UBIs. In this section specifically, the context of business incubators was introduced (Section 3.2), leading to the definition of business incubators, its importance and the types of business incubators. Extensive insights were provided to the essential UBI services offered (Section 3.3), addressing the fifth theoretical objective. The major elements of marketing in organisations, applicable to UBIs, were highlighted (Section 3.4), addressing the sixth theoretical objective, which included the marketing management orientations, marketing strategies and the marketing mix.

Chapter 4 pertained to the research methodology applied to this study. A descriptive research design (Section 4.2) following a quantitative research approach (Section 4.3) was presented. The target population for the study was defined as individuals currently owning or managing a SSO within South Africa (Section 4.4.1). The sampling frame for this research study consisted of a list of SSOs situated in the Vaal Triangle region of South Africa in 2013 (Section 4.4.2). The SSOs were selected based on judgement sampling from the service industry sectors, namely auto, estate agents and property management, health care and beauty, hospitality and

accommodation, and professional service industry sectors. Section 4.4.3 and Section 4.4.4 indicated a non-probability judgement sampling of 125 owners/managers of SSOs in the selected service industry sectors (25 per industry). Within Section 4.5 the data collection method was discussed, which included the discussion on the self-administered questionnaire utilised, pertaining to the questionnaire design (Section 4.5.1), questioning format (Section 4.5.2) and the layout of the questionnaire (Section 4.5.3). The questionnaire pilot testing was discussed in Section 4.6, followed by a discussion on the questionnaire administration in Section 4.7. The techniques utilised to interpret and report on the collected data for the statistical analysis within Chapter 5, was reviewed in Section 4.9. Included in Section 4.9 was a discussion on cluster analysis (Section 4.9.3), correlation analysis (Section 4.9.5), the t-test and ANOVA (Section 4.9.6).

Chapter 5 reported on the main findings of the study. These results are in accordance with the empirical objectives formulated at the beginning of the study in Section 1.3.3. The main findings of the study are presented in the following section.

6.3 MAIN FINDINGS OF THE STUDY

In accordance to the empirical objectives established in Chapter 1 of this study, the main findings can be noted as follows:

6.3.1 SSO owners/managers' perceived importance of UBI services

The first empirical objective (Section 1.3.3) was established to determine the perceived importance ranking of UBI services amongst SSO owners/managers in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors. In order to fulfil this objective, a single-tailed, one-sample t-test was utilised indicating that, in ranking order from most important to least important, the SSO owners/managers' perceived networking and professional services, management services, general business services, physical facilities, financial consulting services and university services as important services for a UBI to provide.

6.3.2 Difference between SSO owners/managers' perceived importance of UBI services regarding the age of the SSO

The second empirical objective (Section 1.3.3) was to determine whether there were differences between the SSO owners/managers' perceived importance of UBI services regarding the young SSOs who had been in operation for less than five years and the mature SSOs that had been in operation for more than six years. An independent sample t-test was conducted revealing that the young and mature SSO owner/managers' perceptions were in agreement with the importance of physical facilities, general business services, networking and professional services, financial consulting services and university services, except for the management services offered by a UBI. Specifically, the owners/managers of the young SSOs regarded the management services as more important than the owners/managers of mature SSOs did.

6.3.3 Differences between SSOs in the various service industry sectors owners/managers' perceived importance of UBI services

The third empirical objective (Section 1.3.3) aimed to determine whether there were differences between SSOs in the auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional service industry sectors owners/managers' perceptions towards the importance of UBI services required. To determine these differences, one-way ANOVA t-tests were undertaken. As indicated, there were differences found between the SSO owners/managers in the auto, estate agents and property management, healthcare and beauty and professional service industry sectors perceived importance of physical facilities and networking and professional services offered by UBI.

6.3.4 SSO owners/managers' perceived importance of UBI services over the business life-cycle phases

The fourth empirical objective (Section 1.3.3) aimed to determine at what phase of the business life cycle, namely pre-start-up, start-up, growth and maturity, the SSO owners/managers' perceived the services offered by a UBI as most important. As

evident from Figure 5.1, it was found that the SSO owners/managers regarded physical facilities, general business services and financial consulting services as important during the pre-start-up phase. Concerning the start-up phase, SSO owners/managers' perceived general business services and management services to be the most important services offered by a UBI. For the growth phase, SSO owners/managers perceived networking and professional services and financial consulting services as the most important services required from a UBI. Interestingly, the SSO owners/managers did not perceive any of the UBI services to be important during the maturity phase, when compared to the importance of the UBI services required during the other phases. The university services offered by a UBI were considered mainly inapplicable to the SSO owners/managers business life-cycle phases.

6.3.5 SSO owners/managers' perceived value of UBI services

The fifth empirical objective was (Section 1.3.3) to determine the perceived value of UBI services based on the SSO owners/managers' presumptions of whether the UBI services would have made a difference to the past and current business operations of their organisation and if they would currently be interested in utilising the UBI services. The results were presented in a histogram (Figure 5.2). The results of these tests revealed that the majority of SSO owners/managers did not presume that the UBI services would have made a difference to the past and current business operations of their organisations. However, there was only a slight difference between the SSO owners/managers who presumed that they would and those who presumed they would not. Therefore, the percentage of SSO owners/managers who presumed the UBI services would have made a difference to the past and current business operations of their organisations is still relevant considering that they made up almost 50 percent of the responses. Conversely, the SSO owners/managers expressed a low interest in utilising the UBI services, thus indicating that they are not interested in the UBI services.

6.3.6 Participant groups based on agreement of the perceived importance of services required from a UBI

The sixth empirical objective (Section 1.3.3) was to determine whether participant groups could be formulated based on the agreement of the SSO owners/managers' perceived importance of UBI services. For this purpose, cluster analysis was conducted revealing that two clusters were established. Furthermore, to examine the extent of the differences between Cluster 1 and Cluster 2, one-way ANOVA and Mann-Whitney U-tests were conducted. The major difference distinguishing Cluster 1 from Cluster 2 is that the SSO owners/managers in Cluster 1 perceived the UBI services as more important to the SSO owners/managers in Cluster 2. Moreover, according to the statistically significant differences found, it is evident that young SSOs, together with female SSO owners/managers, perceive the UBI services as more important than mature SSOs and male SSO owners/managers.

6.4 CONTRIBUTIONS OF THE STUDY

Recently, UBIs have been established in South Africa to guide SOs and assist them in growing and becoming affluent organisations that are capable of reaching a level of independence, thus increasing their chances of survival under competitive market pressures. With this recent development, limited research has been conducted on business incubators and UBIs within the South African context. As such, it would be difficult for business incubators and UBIs to operate effectively when much of the research conducted is based on international markets that differ from the South African markets. Therefore, this study contributed to providing literature, based on international research, which would be deemed suitable for the practices of business incubators and UBIs in South Africa.

The major contribution of this study stemmed from the primary objective, which was to identify the essential UBI services that are considered most important to the SSOs owners/managers. Through the identification of these important UBI services, UBIs are able to identify the needs of their target market adequately and as such, formulate their marketing objectives and strategies in such a manner that they will optimally be able to attract and assist SSOs.

In addition, this study has provided contributions to determine whether UBIs should alter their service offering across the various service sector industries and amongst the SSOs in their respective business life-cycle phases. This study has also contributed to identifying if the SSO owners/managers presume that the service offerings of a UBI would have made, or could possibly make a difference to their organisations and if they would be interested in utilising the services offered by a UBI. Through this identification, the value of UBI services offered in the South African market has become apparent.

6.5 RECOMMENDATIONS

UBIs are becoming powerful sources to help SOs survive and overcome the challenges they face to become affluent organisations that are capable of independence. However, for UBIs to be effective, the importance of their services needs to be recognised by the organisations that utilise them. Likewise, these organisations should have an influence on the service offerings UBIs provide. The following recommendations are based on the literature review of business management principles, essential incubator services and marketing principles, together with a statistical analysis of the feedback received from owners/managers of SSOs. These recommendations present the essential UBI services that SSO owners/managers require from an incubator and are relevant for the inclusion into UBI incubatee programmes.

Six constructs of essential UBI services were identified from the literature portion of the study, which utilised previous empirical studies on the subject. These six constructs were presented in Section 3.3 in Table 3.1. Figure 6.1 presents a diagram of the perceptions of the UBI services important to SSOs.

Figure 6.1 Important UBI services as perceived by the SSO owners/managers

In light of these six empirically classified service constructs, together with the suggested services pertaining to each construct, the following recommendations were formulated based on the results of the study.

6.5.1 Provide networking and professional services when targeting SSOs

Networking is an essential service offered by a UBI. Networking is offered internally, where SSO owners/managers are able to collaborate and discuss mutual issues (Section 3.3.4). Conversely, networking occurs externally with linkages to stakeholders that can be beneficial to the SSO's operations (Section 2.10.2). In addition, these external networks allow a UBI to offer specialised professional services, such as legal representation and accounting or bookkeeping services (Section 3.3.4). The professional services offered by a UBI relate to the functional areas of management and the legal issues in managing a business, such as marketing management and patent and intellectual property management (Section 2.5). The findings of this study indicate that SSO owners/managers perceived the services pertaining to networking and professional services offered by a UBI as the most important services. This is in line with a number of other studies that have also found networking services to be important (Abduh *et al*., 2007:84; Al-Mubaraki & Busler, 2010:11; Flavel & Kalendra, 2008:58). Interestingly, Abduh *et al*. (2007:84) noted that even though networking was essential to the incubatees, the management of incubators did not promote sufficient facilities for networking opportunities. Therefore, in order for UBIs to be successful in providing the assistance required by SSOs, they should focus on providing networking and professional services as these were the services identified as the most important by SSO owners/managers.

The UBI managers need to host both informal and formal events to promote networking opportunities between incubatees, including current and past incubatees, such as arranging events where recognised guest speakers are invited to attend as well as arranging competitions. The purpose of this is to provide entrepreneurs the opportunity to collaborate with each other and discuss mutual issues as well as providing marketing opportunities for all the stakeholders involved. Furthermore, scheduling regular events between entrepreneurs and relevant stakeholders, including business professionals, would be beneficial to the marketing of the UBI. The collaboration could be vital for the incubators in South Africa as the majority of incubators persue an industry focused market strategy, whereby the entrepreneurs could share information relating to the specific industry sector. In addition, the UBI

management should ensure that the physical building facility enables the incubatees to meet and discuss issues informally, for example the facilities could include shared office space for incubatees to socialise in.

6.5.2 Provide management services when targeting SSOs

UBIs offer management services through providing SSOs with support, guidance and counselling on management-related practices, such as business plan development, advertising, and research and development (Section 3.3.3). The findings of this study have identified that the SSO owners/managers perceive the management services of SSOs as the second most important services relative to their business operations. Within the management services offered, Abduh *et al*. (2007:80) have found that general business counselling or mentoring were important services, together with business plan development. However, research and development and product development were not found to be as important, which contradicts the finding of this study as research and development were perceived to be important by the SSO owners/managers. Therefore, in order for a UBI to be effective, it should provide management services when targeting SSOs, as these services were perceived as important.

The UBI's stakeholders, potential and current incubatees will view the management structures of the UBI as a guide to the effectiveness of the management services offered. As such, the UBI management needs to utilise the opportunity to market themselves by having the appropriate management structures in place, which include the necessary skills and knowledge required to support and guide entrepreneurs on their management. The UBI can market their services by developing a portfolio consisting of their business plan, objectives, vision and missions to present to the potential entrepreneurs and other interested stakeholders, which can be presented via the UBI's website. The purpose of this would be to illustrate the value of management services to entrepreneurs and stakeholders, as they will show interest in the UBI if it is capable of presenting its own management services effectively. Moreover, while the UBI will be able to utilise this opportunity to market themselves, they can also show entrepreneurs the potential of being marketed through the UBI.

6.5.3 Provide general business services when targeting SSOs

The UBI offers general business services to the incubatees on a shared basis, which includes services such as access to a photocopier, fax machine and scanner, stock handling and receiving and inventory management (Section 3.3.2). The general business services offered also include administrative services, such as the use of a shared receptionist or secretary (Section 2.5). The results of this study have found that the SSO owners/managers perceive these services as important. Al-Mubaraki and Busler (2010:12) have found that inventory management was not a very important incubator service, which contradicts this study, which has identified that SSO owners/managers perceive inventory management as important. Therefore, UBIs should target the SSO owners/managers with the array of general business services that are perceived as important.

The greatest benefit of a UBI providing general business services is that the incubatees will be able to reduce their overhead costs by sharing these services at market related costs. In some instances, SSOs even operate without these services, such as a receptionist and secretary, as they are unaffordable. Therefore, it is recommended that UBIs incorporate the benefits of the general management services into their marketing strategies used to target SSOs. For the entrepreneurs to view these general business services as valuable, they have to be aware of the cost savings created by the provision of these services, which can be promoted by the UBI making use of sales representatives, advertising and word-of-mouth communications.

6.5.4 Provide physical facilities when targeting SSOs

The physical facilities provided by a UBI refer to the shared services that include telephone equipment, computer and network equipment, physical safety and building security, amongst others. The study has found that the SSO owners/managers' perceive the physical facilities as important UBI services, however, less important than networking and professional services, management services and general business services. Also, in other studies, physical safety and building security and office equipment and furniture were perceived as important services (Meru & Struwig, 2011:121). In addition, Abduh *et al*. (2007:80) have also found that affordable space and building facilities, office equipment and shared office services were important

incubator services. Therefore, as physical facilities have been perceived as important by the SSO owners/managers, the UBI should target SSOs with these services.

The UBI has the potential to market their services by using their physical facilities through making them attractive and appealing to the stakeholders, current and potential incubatees. It is recommended that a UBI promote its physical facilities by ensuring that the UBI is situated in a visible or popular business area, that the building and facilities are well maintained and that they are able to keep up with the latest technology relating to the computer and network equipment provided. This could be marketed to the stakeholders and entrepreneurs when events are held, or when competitions are hosted, or photographs of the physical facilities could be posted on the UBI's website and possibly other social network platforms such as Facebook and LinkedIn. As indicated with the general business services, the physical facilities are provided to the incubatees on a shared basis and, therefore, the UBI can incorporate the same marketing strategies recommended for the general business services to these services.

6.5.5 Provide financial consulting services when targeting SSOs

UBIs provide financial consulting services to SSOs to assist them in acquiring and managing the capital within their organisations (Section 3.3.5). This study has found that the financial consulting services were perceived as important to the SSO owners/managers, but not as important as the networking and professional services, management services, general business services and physical facilities provided by a UBI. In a study conducted by Al-Mubaraki and Busler (2010:12), they found financial services such as financial management and accessing commercial bank loans to be important. However, government procurement processes were not as important, which concurs with the findings of this study. Moreover, Abduh *et al*. (2007:80) found that financial management and accessing government grants were important incubators services, which contradicts the finding of this study as accessing government grants were not perceived as being that important by the SSO owners/managers. Conversely, the study by Abduh *et al*. (2007:80) confer with this study in that access to outside debt or equity and government procurement processes are not as important. Therefore, UBIs should focus on targeting SSOs with the financial consulting services that they perceived as most important and not those that they perceived as less important.

It is recommended that the UBIs collaborate with financial institutions to provide entrepreneurs with the financial consulting services that they require. The UBI will have an advantage if it can create its marketing strategies based on the financial networks that already have been established. The purpose of this would be to illustrate to current and potential entrepreneurs that they will be able to gain access to the capital they require quicker via the UBI than attempting to do so on their own. In addition to these financial networks, it is imperative that the UBI has the professional capacity and required knowledge to assist in the financial management of the entrepreneurs organisations as these owners/managers will not see the value of the financial consulting services if they doubt that the UBI has the capacity to assist them.

6.5.6 Offer university services when targeting SSOs

University services are provided in the context specific environment for a UBI (Section 3.3.6). The findings of this study indicate that the university services were perceived as the least important offering to the SSO owners/managers. However, Meru and Struwig (2011:121) have found that training and management training is important and Al-Mubaraki and Busler (2010:12) found that comprehensive business training was important as an incubator service. Therefore, the UBI should offer these university services to SSOs, but only place emphasis on leadership training and coaching and comprehensive training and education as these were the university services perceived as important from the university services.

6.5.7 Focus on management services when targeting young SSOs

From the literature (Section 2.10.4), it can be noted that young start-up organisations have various struggles to overcome, for example a lack of access to capital, lack of business management skills and high levels of uncertainty (Abduh *et al*., 2007:82), and a lack of marketing and entrepreneurial skills (Flavel & Kalendra, 2008:42). In comparison, mature businesses are able to cover their expenses, have a developed consumer base and are capable of product or service diversification (Fort *et al*., 2013:524).

The results of this study have found that the young and mature SSO owners/managers perceived the UBI services as important. However, statistically significant differences

were found, suggesting that the young SSO owners/managers perceived the management services as more important than mature SSO owners/managers did. Therefore, it is recommended that the UBIs develop marketing strategies focused on the importance of management services, to target young SSO owners/managers. However, the UBI must not neglect the market potential for mature SSOs as these owners/managers have also perceived the UBI services as important. The UBIs can utilise this as an opportunity to market their services to mature SSOs, but not to the extent that these organisations must be placed within the UBI's facilities, but rather to allow these SSOs access to the specialised services such as marketing or accounting services, as advised by Erlewine and Gerl (2004:199).

6.5.8 Provide similar incubator services for SSOs in different industry sectors

Von Zedtwitz and Grimaldi (2006:461) advise that an incubator who focuses on a specific industry could be beneficial as the incubator can create a competitive advantage, the incubator manager can provided specialised knowledge based on the specific industry and the incubatees will be able to establish networks amongst other organisations in the same field. The findings of this study suggest that there are minor differences between the industry sectors, namely auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional services industry sectors. However, the statistically significant differences were established only for the estate agents and property management industry sector differing from the other sectors on the importance of physical facilities and networking and professional UBI services offered. Therefore, the UBIs should not focus on providing specific services in accordance with the various service industry sectors, but rather focus on providing the most important UBI services to all the SSOs within the various industry sectors. Colbert *et al*. (2010:72) suggest that the essential service needs of incubatees might differ based on their type of industry sector. However, contrary to this literature base, the findings of this study indicate that there are only minor differences between the service industry sectors and, therefore, the UBI must concentrate on providing a platform of similar services to the SSOs.

6.5.9 Target SSOs in the pre-start-up and start-up phase of the business life cycle

Flavel and Kalendra (2008:50) suggest that it may be useful to determine the specific needs of the incubatees over their phases of business development. As such, this study aimed to identify the SSO owners/managers' specific UBI service requirements over the phases of their business life cycle (Section 2.8). As indicated in Figure 5.1, the findings of this study have identified that the UBI services were mostly required during the SSOs pre-start-up, start-up and growth phases of their business life cycles. Thus, confirming that the UBI services are most beneficial to young organisations. Therefore, it is recommended that the UBIs develop their marketing strategies in accordance to the particular service needs of the SSOs during their phases of business development.

The UBI programmes will be beneficial to the stakeholders, current and potential entrepreneurs if the UBI's management are able to identify the phase of development of these organisations and offer the services most suited for these phases. As the services have been identified as important, the UBI management must ensure that they are implemented effectively, such as providing physical facilities, general business services and financial consulting services to the organisations in their pre-start-up business life-cycle phase. The UBI can utilise this opportunity to design their marketing strategies to target the young organisations in their pre-start-up, start-up and growth phases by offering the services most required. Through implementing these marketing strategies, the stakeholders and entrepreneur's perceptions of the UBI services and programmes will increase as the value of the UBI will be presented through the identification of the specific service requirements.

6.5.10 Design marketing strategies focused on the value of incubators

UBIs have been recognised as important to SSO operations and survivability (Section 3.2.2). However, if the SSOs do not recognise the value of a UBI, the UBIs effectiveness will be unsuccessful. The findings of this study indicate that a large number of the SSO owners/managers presumed that the services of a UBI would have made a difference to their past and current business operations. However, the SSO

owners/managers did not have a current interest in utilising the services of a UBI. This could be because the SSO owners/managers are not well informed about the operations of a UBI and how a UBI would be able to assist them. Therefore, for UBIs to be effective in creating value for entrepreneurs and stakeholders, it is recommended that they create awareness of their services and programmes through designing their marketing strategies to focus on promoting the benefits of the UBI services and programmes.

6.5.11 Design marketing strategies using market segmentation

It is recommended that UBIs make use of market segmentation and target marketing as a focus towards their marketing strategies (Section 3.4.2). In this study, it was identified that the UBI's market is divided into two segments, namely Cluster 1 and Cluster 2. The SSO owners/managers in Cluster 1, which was made up of a larger percentage of female SSO owners/managers and young SSOs, perceived the UBI services as more important for their organisations than those of Cluster 2.

Through the use of target marketing as a marketing strategy, it is recommended that the UBIs concentrate on gaining the attention of the SSO owners/managers in Cluster 1. This can be done by using various promotion techniques that include, advertising the UBI's services, using sales representatives or hosting competitions and networking events. However, the UBI must also use their marketing strategies for the SSO owners/managers in Cluster 2, but not as extensively as those in Cluster 1. The purpose of this would be that the SSOs owners/managers in Cluster 1 have already identified the UBI's services as important for their organisations and as such, already value the UBI's service offerings. Therefore, the UBI is able to penetrate the market more quickly by developing their marketing strategies for targeting the SSO owners/managers of Cluster 1.

6.5.12 Continue to monitor entrepreneur's requirements for a UBI

In the current competitive environment, UBIs should stay abreast of entrepreneurs' requirements in order to design marketing strategies to attract those entrepreneurs not interested and keep those that are interested in UBI services. The findings of this study show that the entrepreneurs perceive the UBI services as important, but suggest

a minor interest in utilising these services offered by a UBI. However, as the concept of incubation is new to the entrepreneurs in South Africa's market, the entrepreneurs are not well informed of the incubators potential abilities. Therefore, it is recommended that UBIs concentrate on identifying the requirements of entrepreneurs and incorporate these into their marketing strategies and objectives. Through targeting the entrepreneurs with the services they identified as most important, the value of the UBI will become apparent.

6.6 LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

This study was limited to the extent that the important UBI services were only determined from the service industry sector perspective, hereby suggesting that future research could emanate from other industry sectors that could provide valuable contributions to the literature base in South Africa. Moreover, future research could also examine other service industry sectors in addition to those utilised in this study and possibly provide comparisons to those of this study. The focus of this study was to utilise SSOs situated in the Vaal Triangle region of the Gauteng province. However, as this region only forms a minority of South Africa's market, it might be valuable to determine the important UBI services from SO owners/managers situated in other regions of the country, which could also lead to comparative studies as a future research opportunity. Owing to the complexities involved in gathering information from SSO's owners/managers, the sample size of this study was relatively small, indicating that larger sample sizes could be utilised if possible.

In relation to incubators, this study only focused on UBIs and as determined from the literature, there are multiple other business incubators. Therefore, an opportunity exists to determine the important services offered by other types of business incubators in South Africa. Concerning the UBI service offerings, an attempt was made to draw a conclusive list of UBI services based on the prior research conducted. However, these service offerings were by no means conclusive and as such, future research could focus on including more relevant services relating to the advances in e-commerce, imports and exports. Furthermore, other services could be included that specifically relate to the market conditions in South Africa, such as assisting with Black Economic Empowerment (BEE) consultation.

6.7 CONCLUDING REMARKS

SOs are vital to an economic market, especially in South Africa, as they contribute to economic growth, development and employment creation. However, in South Africa, SOs are conflicted with multiple challenges that often lead to their failure. As a result, SOs are not able to reach their full potential of contributing to economic development, growth and the creation of employment opportunities. Business incubators have been introduced to South Africa's markets recently as a means to provide support to the SOs operating within the market. This is done through providing the SOs with an array of services that will assist to establish and cultivate their organisations, within a protected environment. However, for business incubators to be effective in their aim of assisting SOs, they need to identify the incubator services that are most important to the SOs operations.

This study has explored the essential incubator services that SSOs require from a UBI. The results suggest that through the identification of the most important UBI services required from SSOs owners/managers, UBIs are able to tailor their service offerings to meet the specific needs of SSOs. Moreover, this study has guided the formation of policy objectives, marketing strategies and marketing procedures for the effective operations of UBIs in South Africa.

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ANNEXURES

ANNEXURE A

PILOT QUESTIONNAIRE

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

INCUBATOR SERVICES THAT SMALL SERVICE ORGANISATIONS REQUIRE FROM A UNIVERSITY BUSINESS INCUBATOR

Dear **SERVICE ORGANISATION OWNER / MANAGER**,

I am currently working towards completing my thesis under the supervision of Dr N de Klerk as part of the requirements for completing my PhD in Marketing Management at the North-West University (Vaal Triangle Campus). The purpose of this research project is to determine the services that small service organisations require from a **University Business Incubator (UBI) -** An innovative system deliberated to support entrepreneurs in the establishment of organisations, offering typical incubator services, such as shared office space and business assistance, and university-related services, such as student employees and library services.

Please assist me by completing the attached questionnaire. The questionnaire is user-friendly and should take approximately 20 minutes to complete. All responses are confidential and the results will only be used for research purposes, outlined in the form of statistical data.

Thank you – your assistance and contribution is highly appreciated.

Rita Diedericks (20822138@nwu.ac.za)

School of Economic Sciences & IT

Department of Marketing & Business Management

North-West University (Vaal Campus)

SECTION A: Demographical information

Please answer each question accordingly or mark each question with a cross (X) in the appropriate box.

A1	Type of service industry:		
	Auto	Estate agents & property management	Health care & beauty
	Hospitality & accommodation	Professional	Other (specify):

A2	Current position in company:	Owner	Manager

A3	In what year was the organisation started?	

A4	Years of ownership / management at current organisation:	

A5	Number of employees:	0 – 9	10 – 19	20 – 29	30 – 39	40 – 49	50>

A6	Your highest qualification:		
	Grade 12 / Matric	Diploma / Degree	B.Tech / Honours
	Post-graduate	Other (specify):	

A7	Your age:	<20	20 – 29	30 – 39	40 – 49	50 – 59	60>

A8	Your gender:	Male	Female

A9	Your ethnic group:	Black/African	Coloured	Indian/Asian	White
	Other (Please specify):				

SECTION B: Importance of incubator services (left scale).

Please indicate how important each of the following incubator services would be to your organisation, by placing a mark in the appropriate box; 1 being highly unimportant and 6 highly important.

SECTION C: When required (right scale).

Please indicate if these incubator services were available during pre-start-up, start-up, growth and maturity, during which phase you would have used them, by placing a mark in the appropriate box; 1 being during pre-start-up and 4 maturity.

Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important	**Incubator services:**	Pre Start-up	Start-up	Growth	Maturity	Not applicable
1	2	3	4	5	6	Telephone equipment	1	2	3	4	n/a
1	2	3	4	5	6	Computer and network equipment	1	2	3	4	n/a

Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important	**Incubator services:**	Pre Start-up	Start-up	Growth	Maturity	Not applicable
1	2	3	4	5	6	Conference room	1	2	3	4	n/a
1	2	3	4	5	6	Cafeteria	1	2	3	4	n/a
1	2	3	4	5	6	Affordable space and building facilities	1	2	3	4	n/a
1	2	3	4	5	6	Office equipment and furniture	1	2	3	4	n/a
1	2	3	4	5	6	Physical safety and building security	1	2	3	4	n/a
1	2	3	4	5	6	Audio-visual equipment	1	2	3	4	n/a
1	2	3	4	5	6	Receptionist / Secretary	1	2	3	4	n/a
1	2	3	4	5	6	Photocopier / Fax machine / Scanner	1	2	3	4	n/a
1	2	3	4	5	6	Postal and express	1	2	3	4	n/a
1	2	3	4	5	6	Stock handling / receiving	1	2	3	4	n/a
1	2	3	4	5	6	Clerical / Assistance services	1	2	3	4	n/a
1	2	3	4	5	6	Inventory management	1	2	3	4	n/a
1	2	3	4	5	6	Word processing services / Typing	1	2	3	4	n/a
1	2	3	4	5	6	Business plan development	1	2	3	4	n/a
1	2	3	4	5	6	Advertising	1	2	3	4	n/a
1	2	3	4	5	6	Research and Development	1	2	3	4	n/a
1	2	3	4	5	6	Human resources management	1	2	3	4	n/a
1	2	3	4	5	6	Product or service design and development	1	2	3	4	n/a

Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important	**Incubator services:**	Pre Start-up	Start-up	Growth	Maturity	Not applicable
1	2	3	4	5	6	Business networks outside the incubator (Strategic partners, other clients etc.)	1	2	3	4	n/a
1	2	3	4	5	6	Business networks between incubator tenants (Peer networking, sharing information, experience, problems etc.)	1	2	3	4	n/a
1	2	3	4	5	6	Legal counselling	1	2	3	4	n/a
1	2	3	4	5	6	Legal representation	1	2	3	4	n/a
1	2	3	4	5	6	Patent and intellectual property management	1	2	3	4	n/a
1	2	3	4	5	6	Accounting or bookkeeping	1	2	3	4	n/a
1	2	3	4	5	6	Marketing management	1	2	3	4	n/a
1	2	3	4	5	6	Financial management	1	2	3	4	n/a
1	2	3	4	5	6	Accessing commercial bank loans	1	2	3	4	n/a
1	2	3	4	5	6	Accessing government grants	1	2	3	4	n/a
1	2	3	4	5	6	Government procurement process	1	2	3	4	n/a
1	2	3	4	5	6	Government contract preparation	1	2	3	4	n/a
1	2	3	4	5	6	Accessing outside capital or equity	1	2	3	4	n/a
1	2	3	4	5	6	Business taxes	1	2	3	4	n/a
1	2	3	4	5	6	Equity and debt finance	1	2	3	4	n/a
1	2	3	4	5	6	Links to financial resources	1	2	3	4	n/a
1	2	3	4	5	6	Student employees	1	2	3	4	n/a

Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important	Incubator services:	Pre Start-up	Start-up	Growth	Maturity	Not applicable
1	2	3	4	5	6	Faculty consultants	1	2	3	4	n/a
1	2	3	4	5	6	Library resources	1	2	3	4	n/a
1	2	3	4	5	6	Comprehensive business training and education	1	2	3	4	n/a
1	2	3	4	5	6	Leadership training and coaching	1	2	3	4	n/a

Additional incubator services not listed above:

Would you be interested in the services of a UBI for your business now? If yes, which services?

SECTION D: PHASE OF INCUBATOR USAGE

Please provide your opinion on the following statement regarding the phase usage of a UBI. Please indicate your answer by placing a mark in the appropriate box/es, namely during pre-start-up, start-up, growth and maturity phases. You may place a mark in more than one box, if necessary.

		Pre Start-up	Start-up	Growth	Maturity
D1	At which phase/s would you / would you have been be interested in using the services of a UBI for your organisation?				

SECTION E: INCUBATOR USAGE

Please provide your opinion on the following statements regarding the usage of a UBI. Please indicate your answer by placing a mark in the appropriate box; 1 being yes and 2 no.

		Yes	No
E1	Do you feel the services of a UBI would have made a difference to your organisation in the past?	1	2
E2	Do you feel the services of a UBI will make a difference to your organisation now?	1	2

Thank you!

ANNEXURE B

MAIN SURVEY QUESTIONNAIRE

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

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Please assist me by completing the attached questionnaire. The questionnaire is user-friendly and should take approximately 20 minutes to complete. All responses are confidential and the results will only be used for research purposes, outlined in the form of statistical data.

Thank you – your assistance and contribution is highly appreciated.

Rita Diedericks (20822138@nwu.ac.za)

School of Economic Sciences & IT

Department of Marketing & Business Management

North-West University (Vaal Campus)

Section A: Demographical information

Please mark the appropriate box with a cross (X) or write down your answer.

A1	Type of service industry:		
	Auto	Estate agents & property management	Health care & beauty
	Hospitality & accommodation	Professional	Other (specify):

A2	Current position in company:	Owner	Manager

A3	Please indicate in what year the organisation was started:	

A4	Please indicate the years of ownership / management at current organisation:	

A5	Number of employees:	0 – 9	10 – 19	20 – 29	30 – 39	40 – 49	50>

A6	Please indicate your highest qualification:		
	Grade 12 / Matric	Diploma / Degree	B.Tech / Honours
	Post-graduate	Other (specify):	

A7	Age at your last birthday:	<20	20 – 29	30 – 39	40 – 49	50 – 59	60>

A8	Gender:	Male	Female

A9	Ethnic group:	Black/African	Coloured	Indian/Asian	White	
	Other (Please specify):					

Section B: Importance of incubator services

Please indicate how important each of the following incubator services would be to your organisation, by placing a mark in the appropriate box; 1 being very unimportant and 6 very important.

	Incubator services offered:	**Very unimportant**	**Unimportant**	**Somewhat unimportant**	**Somewhat important**	**Important**	**Very important**
Physical facilities:							
B1	Telephone equipment	1	2	3	4	5	6
B2	Computer and network equipment	1	2	3	4	5	6
B3	Conference room	1	2	3	4	5	6

Incubator services offered:		Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
B4	Cafeteria	1	2	3	4	5	6
B5	Affordable space and building facilities	1	2	3	4	5	6
B6	Office equipment and furniture	1	2	3	4	5	6
B7	Physical safety and building security	1	2	3	4	5	6
B8	Audio-visual equipment	1	2	3	4	5	6
General business services:							
B9	Receptionist / Secretary	1	2	3	4	5	6
B10	Photocopier / Fax machine / Scanner	1	2	3	4	5	6
B11	Postal and express	1	2	3	4	5	6
B12	Stock handling / receiving	1	2	3	4	5	6
B13	Clerical / Assistance services	1	2	3	4	5	6
B14	Inventory management	1	2	3	4	5	6
B15	Word processing services / Typing	1	2	3	4	5	6
Management services:							
B16	Business plan development	1	2	3	4	5	6
B17	Advertising	1	2	3	4	5	6
B18	Research and Development	1	2	3	4	5	6
B19	Human resources management	1	2	3	4	5	6
B20	Product or service design and development	1	2	3	4	5	6
Networking and professional services:							
B21	Business networks outside the incubator (Strategic partners, other clients etc.)	1	2	3	4	5	6

Incubator services offered:		Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
B22	Business networks between incubator tenants (Peer networking, sharing information, experience, problems etc.)	1	2	3	4	5	6
B23	Legal counselling	1	2	3	4	5	6
B24	Legal representation	1	2	3	4	5	6
B25	Patent and intellectual property management	1	2	3	4	5	6
B26	Accounting or bookkeeping	1	2	3	4	5	6
B27	Marketing management	1	2	3	4	5	6
Financial consulting services:							
B28	Financial management	1	2	3	4	5	6
B29	Accessing commercial bank loans	1	2	3	4	5	6
B30	Accessing government grants	1	2	3	4	5	6
B31	Government procurement process	1	2	3	4	5	6
B32	Government contract preparation	1	2	3	4	5	6
B33	Accessing outside capital or equity	1	2	3	4	5	6
B34	Business taxes	1	2	3	4	5	6
B35	Equity and debt finance	1	2	3	4	5	6
B36	Links to financial resources	1	2	3	4	5	6
University services:							
B37	Student employees	1	2	3	4	5	6
B38	Faculty consultants	1	2	3	4	5	6
B39	Library resources	1	2	3	4	5	6
B40	Comprehensive business training and education	1	2	3	4	5	6

Incubator services offered:		Very unimportant	Unimportant	Somewhat unimportant	Somewhat important	Important	Very important
B41	Leadership training and coaching	1	2	3	4	5	6

Additional incubator services required, but not listed above:

_____

_____

Section C: Phase when required

If these incubator services were available during business pre-start-up, start-up, growth and maturity phase, during which phase would you have used them? Please mark the appropriate box with a cross (X); 1 being during pre-start-up and 4 maturity.

Incubator services:		Pre-start-up	Start-up	Growth	Maturity	Not applicable
C1	Physical facilities	1	2	3	4	n/a
C2	General business services	1	2	3	4	n/a
C3	Management services	1	2	3	4	n/a
C4	Networking and professional services	1	2	3	4	n/a
C5	Financial consulting services	1	2	3	4	n/a
C6	University services	1	2	3	4	n/a

Section D: Value of incubator services

		Yes	No
D1	Do you feel the services of a UBI would have made a difference to your organisation in the past?	1	2
D2	Do you feel the services of a UBI will make a difference to your organisation now?	1	2
D3	Are you interested in the services of a UBI for your organisation now?	1	2

Thank you very much for your participation!

ANNEXURE C

TUKEY HSD POST HOC TESTS

						95% of confidence interval	
Construct	**(I) Group**	**(J) Group**	**Mean Difference (I-J)**	**SE**	**Sig.**	**Lower bound**	**Upper bound**
Physical facilities	Auto	Estate agents and property management	-0.839*	0.234	0.004	-1.488	-0.191
		Health care and beauty	-0.031	0.231	1.000	-0.672	0.611
		Hospitality and accommodation	-0.529	0.236	0.175	-1.185	0.128
		Professional	-0.329	0.226	0.594	-0.957	0.299
	Estate agents and property management	Auto	0.839*	0.234	0.004	0.191	1.488
		Health care and beauty	0.809*	0.231	0.006	0.168	1.450
		Hospitality and accommodation	0.310	0.236	0.684	-0.346	0.967
		Professional	0.510	0.226	0.167	-0.117	1.138

						95% of confidence interval	
Construct	**(I) Group**	**(J) Group**	**Mean Difference (I-J)**	**SE**	**Sig.**	**Lower bound**	**Upper bound**
	Health care and beauty	Auto	0.031	0.231	1.000	-0.611	0.672
		Estate agent and property management	-0.809*	0.231	0.006	-1.450	-0.168
		Hospitality and accommodation	-0.498	0.234	0.215	-1.148	0.151
		Professional	-0.298	0.223	0.670	0.919	0.322
	Hospitality and accommodation	Auto	0.529	0.236	0.175	-0.128	1.185
		Estate agent and property management	-0.311	0.236	0.684	-0.967	0.346
		Health care and beauty	0.498	0.234	0.215	-0.151	1.148
		Professional	0.200	0.229	0.906	-0.436	0.836

						95% of confidence interval	
Construct	**(I) Group**	**(J) Group**	**Mean Difference (I-J)**	**SE**	**Sig.**	**Lower bound**	**Upper bound**
	Professional	Auto	0.329	0.226	0.594	-0.299	0.957
		Estate agent and property management	-0.510	0.226	0.167	-1.138	0.117
		Health care and beauty	0.298	0.223	0.670	-0.322	0.919
		Hospitality and accommodation	-0.200	0.229	0.906	-0.836	0.436
Networking and professional services	Auto	Estate agents and property management	-1.109*	0.295	0.003	-1.927	-0.291
		Health care and beauty	-0.099	0.291	0.997	-0.908	0.710
		Hospitality and accommodation	-0.284	0.298	0.876	-1.112	0.545
		Professional	0.013	0.285	1.000	-0.779	0.805

						95% of confidence interval	
Construct	**(I) Group**	**(J) Group**	**Mean Difference (I-J)**	**SE**	**Sig.**	**Lower bound**	**Upper bound**
	Estate agents and property management	Auto	1.109*	0.295	0.003	0.291	1.927
		Health care and beauty	1.010*	0.291	0.007	0.201	1.818
		Hospitality and accommodation	0.825	0.298	0.051	-0.003	1.653
		Professional	1.122*	0.285	0.001	0.329	1.914
	Health care and beauty	Auto	0.099	0.291	0.997	-0.710	0.908
		Estate agent and property management	-1.010*	0.291	0.007	-1.818	-0.201
		Hospitality and accommodation	-0.184	0.295	0.971	-1.003	0.635
		Professional	0.112	0.282	0.995	-0.670	0.895
	Hospitality and accommodation	Auto	0.284	0.298	0.876	-0.545	1.112
		Estate agent and property management	-0.825	0.298	0.051	-1.653	0.003
		Health care and beauty	0.184	0.295	0.971	-0.635	1.004
		Professional	0.296	0.289	0.843	-0.506	1.099

						95% of confidence interval	
Construct	**(I) Group**	**(J) Group**	**Mean Difference (I-J)**	**SE**	**Sig.**	**Lower bound**	**Upper bound**
	Professional	Auto	-0.013	0.285	1.000	-0.805	0.779
		Estate agent and property management	-1.122*	0.285	0.001	-1.914	-0.329
		Health care and beauty	-0.112	0.282	0.995	-0.895	0.671
		Hospitality and accommodation	-0.296	0.289	0.843	-1.099	0.506