Evaluating the relationship between financial applications and entrepreneurial success in identified companies

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ABSTRACT

Financial applications can be defined as any financial management tool that help businesses to make financial decisions such as budgeting, cash flows, capital investments, accounting records and forecasting. These financial applications can take a form of simple excel spread sheets to complex computerised systems depending on the size of the business.

The purpose of the study was to evaluate whether a relationship exists between these financial applications and entrepreneurial success. In this study, entrepreneurial success was considered to be the ability of generating positive income, the ability to expand and create employment and the ability to survive economic meltdown.

To accomplish this, a questionnaire survey was conducted. Four hundred and twelve (412) questionnaires were distributed to entrepreneurs across South Africa. One hundred and forty one entrepreneurs responded (141). The results reflected that there is a strong positive relationship between financial applications and entrepreneurial success. However it was established that there is a lack of support from stakeholders such as funding institutions and the government in training entrepreneurs on awareness, knowledge and usage of financial applications.

It is recommended that the stakeholders prioritise financial applications training for entrepreneurs if the country wants to experience economic growth.

Key terms

Financial applications, entrepreneurial success, entrepreneurship,

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CHAPTER 1 BACKGROUND AND SCOPE OF THE STUDY

1.1 Introduction

"Technological changes, shift in population dynamic, economic fluctuations and globalization among other forces all around the world have caused a huge change to societies as far as doing business is concerned. This brought about new challenges and opportunities and also brought about an increased emphasis on entrepreneurship by organisations, the public, and government so to say". (GEM Global Report, 2012). Entrepreneurship has become fundamentally important for any growing economy and researchers throughout the world have turned their attention to it (Bruyat & Julien, 2000). This is strongly supported by (Audretsch *et al.*, 2006) who in a recent survey gives a strong conviction that entrepreneurship is a crucial driver of economic growth in both developed and developing economies (Audretsch *et al.*, 2006).

Since the year 1999 Global Entrepreneurship Monitor (GEM) has been collecting data using standardized formats and procedures to evaluate potential as well as actual entrepreneurs (Zacharakis *et al.*, 2000). It is indicated that the research currently covers 70 countries including both developed and developing economies (GEM, 2014). The focus of the GEM report is to portrait the rates of business start-ups and self-employment across countries of the world (Acs *et al.*, 2008). Statistics given comprise of both opportunity–motivated entrepreneurs and those driven by necessity or circumstance (Reynolds *et al.*, 2005).

Entrepreneurship is concerned with the process of change, the emergence, and creation of new value and at the same time the change in and development of the individual (Bruyat & Julien, 2000). In this context it is interesting to note that already in 1934 (Schumpeter, 1934), said that entrepreneurship is the driving force of innovation and an engine that stimulate economic development. Therefore, in an economic context, entrepreneurship can be viewed as an intuitive process of anticipating, recognising, evaluating and exploiting productive ventures with the view to make profit. The ventures at the end produce goods and services which results in meeting societal needs and aspirations (Influence Africa, Entrepreneurship Development). (Kim *et al.*, 2006) concludes that entrepreneurship contributes to business dynamics in all economies, and the individual benefits of starting a business are clear.

The entrepreneurial success as presented by Millan *et al.* (2014;628) boarders around four key components which are, (i) the ability of the entrepreneur to make positive earnings, (ii) the ability of the entrepreneur to survive in turbulent times. (iii) the ability to create jobs. (iv) the ability to survive as an employer. These form the basis of looking at an entrepreneur as having been successful or not successful.

In order for entrepreneurs to realize success, it is necessary to acquire knowledge of financial applications and usage. Financial applications for business are known to help entrepreneurs to improve operations, decision making processes and most importantly enhance success (Rouse, 2012). These are processes by which a firm or an individual entrepreneur constructs a financial presentation of some or all aspects of the business. The financial applications are usually characterized by performing a variety of calculations including accounting capital budgeting, forecasting and other; the objective being to make decisions based on sound financial information (Dabir & Nigudkar, 2007). Financial applications implemented can range depending on the size of the organisation from simple Excel spread-sheets to complex commercial programs, (www.moneyterm.co.uk).

1.2 Key focus of the study

According to the GEM report of 2015 some social and economic problems can be resolved in an environment where it is possible to achieve high levels of entrepreneurial success. It is indicated that some of the challenges such as unemployment currently standing at 40% in South Africa can be addressed by the ability of entrepreneurs to create jobs. The report indicates that there has since 2012 been a constant increase in the proportion of entrepreneurs who discontinue business (GEM, 2014). The 2014 statistics indicate that in South Africa 42.5% of entrepreneurs discontinued business which compares unfavourably with Sub- Saharan Africa where the discontinuation figure is given as 27.7% on average.

This study seeks to establish whether a relationship exists between financial applications and entrepreneurial success. According to the GEM (2014) report indications are that many entrepreneurs have problems in accessing finance to sustain their business. Obtaining finance may be one part of the problem, another most probably are sound management of the finances of the entity. In this regard the GEM (2014) report specifically point out that one of the reasons entrepreneurs in SA have

difficulty obtaining finance, may be a lack of financial knowledge and access to a financial system, an inability to do budgeting and forecasting as well as other related skills. It is possible that the major reasons for the lack of success in business amongst entrepreneurs in South Africa could be attributed to either the non- or improper use of financial applications. In this context, aspects such as capital budget, financial forecasting together with financial accounting and other financial applications, in both start-ups and established entities specifically to raise capital and/or to attain entrepreneurial success comes to mind.

At this point it is unclear whether the use of or non-use of financial applications have an impact on whether entrepreneurs in South Africa are successful or not. The question therefore needs to be asked, whether a relationship exists between entrepreneurial success and the use of financial applications.

1.3 Research questions

- Do entrepreneurs in South Africa, from identified companies use financial applications to raise capital, make business decisions, and to achieve entrepreneurial success?
- Is there a relationship between entrepreneurs making good business decisions, achieving success and the use of financial applications?
- What impact do financial applications have on business achieving success as well as maintaining constant growth?

1.4 Research objectives

1.4.1 Main objective

The overarching objective of the study is to establish whether a relationship exists between the knowledgeable use of financial applications and entrepreneurial business success.

1.4.2 Secondary objectives

- To establish through literature study whether financial applications are used by entrepreneurs in the identified companies, and

- To establish if there is a relationship between the use of financial applications and business success.

1.5 Research design

1.5.1 Research approach

This is defined as structure and plan set for an investigation of an issue so as to obtain solutions to research questions (Bloomberg *et al.*, 2008). The research will be quantitative using exploratory factor analysis, which will involve statistical analysis. In the study the survey method for data collection and analysis as stated by Floyd and Flower (2002), numerical or quantitative data must be produced from the study population (Floyd & Flower, 2002). Quantitative, unlike qualitative research, will require a large number of responses and because it is quantitative no control groups will be required. Instead a non- experimental research design will be used (De Vos *et al.*, 2012). The method will be used to determine factors that affect and hinder the use of financial applications to attain entrepreneurial success. The study has to follow a detailed format and frame work that tracks the problem formulation linking it with the process of data collection (Leedy & Ormond, 2005). The study will be conducted under the cross-sectional research design according to Struwig *et al.*, (2001). The implication is that the research is an objective, systematic process which involves a sizeable number of participants through a data gathering method.

1.5.2 Research method

This research will be carried out in two phases, namely literature review and an empirical study.

1.5.3 Literature review

A review will be conducted regarding financial applications, entrepreneurship survival during economic meltdown, the entrepreneur's ability to create jobs, and success of entrepreneurs. Information will be gathered through the consultation of various research engines such as Google Scholar, EbscoHost Academic search premier, Business source premier, E-Journal with full text and LexisNexis. As part of this research the following reports will be considered: The Global Entrepreneurship Reports for years 2009 to 2014, financial times, entrepreneurship and finance related websites and also

South Africa daily financial newspapers. Various other financial and entrepreneurship books on the subject matter will be consulted, these include financial applications for business owners and Entrepreneurs.

1.5.4 Empirical study

This will involve the testing of hypothesis through the research conducted (Welman *et al.*, 2005).

1.5.5 Units of analysis

Involving all members of the population in research is an impractical approach (Welman *et al.*, 2005). This research will consider entrepreneurs running identified companies in South Africa, men and woman, young and old, local and foreign owned. Those who are starting -up, those who are well established and those who are exiting. The Convenience sampling will be used to gather data amongst entrepreneurs in identified companies. All participants must be proficient in English in order to complete the questionnaire.

Due to this, our analysis will be carried out on a broad scale. According to Huysamen (1993), it is important to use measuring instruments that will ensure reliability and validity for this particular study, the survey questionnaire is the most appropriate instrument.

This will help obtain information from the respondent's demographics and other such as age, educational qualification, and experience in business, management structure and other important components of the business. The number required of informants for this exercise will be 141 according to Field (2009), state that the reliability of factor analysis depends on the sample size. Therefore the suggested 141 is adequate to draw up conclusions for the research (Field, 2009). The process will have to be in conformity with the Likert scale.

1.5.6 Data collection

Since this is exploratory research, the researcher will use a questionnaire as a tool for data collection. The primary objective is to compile a validated research tool in the form of a questionnaire that will test the impact of use of financial applications on success of entrepreneurial initiatives. According to Saunders *et al.* (2011), a questionnaire is an

easy method to gather responses from a large sample. This is also efficient in the sense that informants respond to the same set of questions (Saunders *et al.*, 2011).

Table 1-1: Questionnaire sections and purpose

Section	Purpose of section
Section A	**Demographic information:** This section will concentrate on basic information about the entrepreneur. The questions to be included in this section will boarder around, the age of the entrepreneur, gender, nationality, years in business, type of business. This section will also cover information regarding the business in terms of number of employees.
Section B	**Awareness of the Financial applications available:** This section will focus on establishing the knowledge each entrepreneur has on the financial applications available. These ranges from simple excel to complex models.
Section C	**The knowledge and use of Financial applications:** This section will focus on the degree of knowledge the entrepreneur has in using financial applications to achieve entrepreneurial success
Section D	**The ability to generate positive income:** This section will interrogate the relationship that exists between financial applications and the entrepreneur's ability to generate positive income.
Section E	**The ability to expand and create employment:** This section will endeavour to establish the degree to which the use of financial applications can impact on entrepreneurs expansion and employment creation
Section F	**The ability to survive during economic meltdown:** This section will focus on entrepreneur's ability to survive during economic meltdown making use of financial applications

1.5.7 Data analysis

For analysing the data for this research, the researcher will make use of SPSS 23.0 (SPSS Inc., 2012). A test will be carried out to validate the suitability of the dataset for exploratory factor analysis. The exploratory factor analysis will be used to determine construct validity as indicated by the steps described in (Burns & Grove, 2009).

These steps involve:

- The development of a correlation matrix.
- A principal component analysis which will provide the Eigenvalues and the amount of variance as indicated by each factor and factor loadings, and

- A factor rotation which include either a Varimax Rotation or Oblique

This will help to assess the strength of the link between financial applications, ability to generate positive income, ability to expand and create employment and ability to survive during economic meltdown. On data analysis it is critical to have consistency and accuracy. This can be achieved by testing data through the use of a reliability and validity instruments (Whitelaw, 2001). The reliability of the instruments is measured by what is referred to as the Cronbach Alpha co-efficient, according to Schmitt (1996); this instrument is based on the average correlation of variables that are being tested. To assess the strength of the inter-correlation-ship between the variables and the factorability of the data, two statistical measures will be used. The Bartlett's test of sphrericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy as supported by (Pallant, 2010).

As seconded to Pietersen and Maree (2012), the analysis process will have to detect and eliminate irrelevant items by means of item analysis then perform factors analysis. Descriptive statistics will be used to present the analysis. The functionality of the investigated data will be presented in terms of means scores and standard deviations.

1.6 Managerial implication of the research

The development and use of financial applications is critical to the success of any entrepreneurial establishment (Sawyer, 2009). This study will expose the need to help many entrepreneurs who are struggling to make meaningful investment decisions. It should also help identify the gaps on forecasting future results and propose training mechanisms that will help them to decide on how to handle current success for future sustenance. The other great benefit of the study to the community of entrepreneurs is the realisation of financial applications for funding purposes. In a nutshell this study should give an entrepreneur confidence over the following issues:

- Raising capital for start-up.
- Plan new project and initiatives based on past success.
- Assess growth at every stage.
- Make critical business decision including decision on ploughing back profit.

- Reduce unnecessary cost, streamline operation and manage budgets.

1.7 Demarcation of the study

Chapter 1. Nature and Scope of the Study:

Chapter 2. Literature Review and Research

Chapter 3. Research Methodology

Chapter 4. Results and discussion

Chapter 5. Conclusion and Recommendations

CHAPTER 2 ENTREPRENEURSHIP AND FINANCIAL APPLICATIONS REVIEW

2.1 Introduction

The emphasis of this chapter is on the definition of entrepreneurship and the role it plays in economic development, an analysis of what entails entrepreneurial success and to define and identify different types of financial applications available to and used by entrepreneurs. This theoretical and literature analysis is compiled out of articles, journal articles, web pages, annual reports from corporate business and interested organizations as well as other applicable sources.

2.2 Entrepreneurship

The concept entrepreneurship is viewed and defined differently in the research community, the world of business and economic development. However, amongst those who have attempted to address this subject are Thurik and Wennekers (2004) who define entrepreneurship as a type of behaviour with a focus on creating opportunities from the available minimum resources. Thurik and Wennekers (2004) argue that entrepreneurial behaviour can influence both small and big businesses. As already indicated in the introduction by Bruyat and Julien (2000) who are of the opinion that entrepreneurship is concerned with the process of change and the creation of new value. In the GEM report (2014), entrepreneurship is defined as “any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals or an established business” (Reynolds *et al.*, 1999:3).

According to the GEM report (2014), modern economies are being driven by entrepreneurship spirit amongst its citizens. This culminates to the need of having trained entrepreneurs in different aspects of the business, especially on financial management. The training of entrepreneurs in areas of financial management help in creating an environment that is conducive to and fosters the establishment of start-ups by individuals, creating self-employment opportunities or support small businesses to address the economic needs of the society Bruyat and Julien (2000). This financial enlightenment helps entrepreneurs to consider the push and pull factors of becoming an entrepreneur. Pull factors are issues like the available economic opportunities and push

factors include joblessness due to retrenchment and general economic hardship. In the case of push factors individuals are forced to think of ways to earn a living (Acs *et al.*, 2008). The table below shows the ratios of opportunity and necessity driven entrepreneurial activity in South Africa by race groups for the period 2005 to 2014.

Table 2-1: Motivation for early stage entrepreneurial activity by race groups, 2005-2014

		2005	2009	2013	2014
Black african	- opportunity driven	22.9%	49.1%	58.3%	59.8%
	- necessity driven	29.3%	30.1%	27.4%	24.8%
Coloured	- opportunity driven	9.3%	3.0%	1.5%	3.4%
	- necessity driven	2.1%	0.6%	1.2%	1.7%
Indian	- opportunity driven	6.4%	1.8%	1.8%	3.0%
	- necessity driven	3,6%	0.6%	0.9%	0.0%
Whites	- opportunity driven	19.3%	9.7%	7.3%	4.7%
	- necessity driven	3.6%	1.2%	0.9%	1.7%
		96,5%	96,2%	99,3%	99,2%

Read as : 22.9% of Black African early-stage entrepreneurs in 2005 were motivated by opportunity and 29.3% by necessity.

Source: GEM South Africa (2014:30)

The information above gives an analysis of how entrepreneurial activities that are opportunity driven have continued to grow amongst black people in South Africa. Whereas activities that are necessity-driven have been going down with exception for the years 2005 to 2009. The opportunity driven activities could be linked to the Broad-Based Black Economic Empowerment (BBBEE) initiative by the government to empower the formerly disadvantaged black people by supporting them financially to establish start-up businesses such as tenderpreneurship.

Due to the fact that most people who become entrepreneurs are either pulled by available resources or pushed by circumstances, most of them will not have the understanding of what their entrepreneurship activities have on the economic front. The focus will be at personal level gains, yet their involvement has a national impact, in areas of employment and Gross Domestic Product (GDP) per capita. Research carried out by the GEM indicates that, in South Africa many start-ups have folded business within their first 3 years of establishment. The reason for this has also been highlighted,

ranging from lack of funding or withdrawal of funding and lack of necessary skills to run the business (GEM, 2013:25).

In the current global trend a country's success in dealing with unemployment, increasing productivity and enhancing growth is squarely linked directly to its promotion of entrepreneurial activities. This view is shared by Kim *et al.* (2006), when they underscore that the economics activities of a country boarders around the dynamics of entrepreneur's involvement in business.

South Africa is regarded as an economic harbour of Africa according to the GEM report (2012), and looking at the entrepreneurial activities in the country there is a mismatch. The notion way back in the 90s Greenwood and Jovanovic (1990), that large fraction of productivity in the economy lies in the birth of new start –ups can be put to test here. This may be a perfect explanation as to why the unemployment rate has gone up in recent times.

The role that is played by entrepreneurship in communities and largely in the country is unquestionable. There is need for particular environmental factors such as social, political and economical to be considered in order for entrepreneurship to strive. They exert a huge influence in creating unique business atmosphere for entrepreneurship (Schwab & Sala-i-Martín, 2014). Growth that is sustainable, that has a focus on its people and is inclusive in nature is that which seeks to generate widespread employment and reduces poverty (GEM, 2014:40). (Schwab & Sala-i-Martín, 2014:40) state that "in order to address the challenges of sustaining development, countries need to embrace extensive growth based on productivity increases driven by improvements in the quality of human and other capital and by innovation. Government policies aimed at creating an enabling and business friendly environment are thus critical, as SMEs play a key role in achieving sustainable growth and contribute to economic development." This statement underscores the importance of right environment for entrepreneurial activities as well as the role it plays in economic development.

2.3 Entrepreneurial success

Entrepreneurship is increasingly recognized as the primary driver to economic viability and growth at all levels and that it plays a crucial role during times of economic uncertainty such as global recession (Lerner, 2010) (Bhasin & Venkataramany, 2010) The entrepreneurial intent and subsequent activity are increasingly acknowledged as vital to economic development and success, and particularly worthy of considerable support and resource investment in education and economic policy (Aquino, 2005):(Floyd & McManus, 2005). Successful entrepreneurship is then based on the diligent use and application of multiple information sources, both formal and informal, providing new understanding and information about the potential new venture opportunities and about the appropriate utilization of the knowledge gained from prior learning and work experience (Fiet, 2002). The challenge many entrepreneurs have is effective problem solving mechanisms, failure to make quick decisions during turbulent times where there is increased uncertainty in the global business atmosphere. The demand is to have entrepreneurs who are not only traditional in their thinking and way of doing business, but entrepreneurs who are dynamic in terms of information gathering, thinking patterns, reasoning, analytics and creativity (Siggelkow & Rivkin, 2005). Maani and Majaraj (2004) also added that in order to achieve success the entrepreneur must not only be creative, but also use intuition, conscious emotional assessments, integrative and synergistic thinking (Maani & Majaraj, 2004).

Entrepreneurial success as indicated in the introduction should be governed by measurable tenants. It should be possible to apply certain clarified principles to measure success. As suggested by Millán *et al.* (2014) entrepreneurial success boarders on four key components which are commonly used within existing empirical literature and are informative for policy, are:

I) The ability of the entrepreneur to make positive earnings

The reason to start a business is hinged on the desire to earn income. It is therefore imperative for an entrepreneur to measure their effort in the business against the income they generate visa-vi the investment committed to that venture. According to the research which was carried out by Millán *et al.* (2014), they measured the performance of an entrepreneur business by using earnings equations which were estimated by means of regressions.

The results indicated that entrepreneurial success as far as positive earnings is concerned is linked to educational back ground of the entrepreneur (Millán *et al.*, 2014). This finding is key for our study as it exposes the need to examine the relationship between the use of financial applications and business success of which education plays a key role in that understanding This is supported by Van Praag (2005), when he mentioned the fact that financial education is the major determinant of entrepreneur's earnings (Van Praag, 2005).

II) The ability of the entrepreneur to survive in turbulent times

The environment for entrepreneurship is dynamic and highly complex with rapidly unanticipated changes, because of this many interdependent and interrelated parts interact and produce outcomes that are very difficult to predict. Such challenging environment requires the entrepreneur to have in place a well-documented plan in order to hedge against this unpredictability (Groves *et al.*, 2011). One of the major ways of evaluating the entrepreneurial success in to look at how long the business has survived years of operation. According to the GEM report of 2014, South Africa has suffered in the area of keeping entrepreneurs in business over time. The reasons for business discontinuance are many and varied (Herrington, Kew & Kew, 2014) Table 2.2 below adapted from the GEM Report 2014 shows the various challenges that push entrepreneurs out of business.

On top of the list as the reason for failed survival is lack of profitability at 42, 5% in 2014. This is directly linked to the first entrepreneurial success measure above. If the business is not profitable it will not be able to meet its obligations and cannot survive turbulent times as a result it folds off (Herrington *et al.*, 2014). According Millán *et al.* (2013) entrepreneurs with secondary or a higher level of education have lower chances to end up in unemployment or inactivity, compared to those with only primary education. They also conclude that the education of the population can be used as direct instrument to develop high quality entrepreneurship irrespective of the labour market choices that educated people make. (Millán*.et al..,* (2013).

Table 2-2: Reasons for business exit in South Africa 2006-2104

	2006	2008	2009	2010	2011	2012	2013	2014	Ave SSA
Opportunity to sell	11,8	6,7	3,5	1,4	2,0	1,3	2,8	5,3	5,8
Business not profitable	11,4	31,3	26,0	24,4	32,6	28,7	36,4	42,5	27,7
Problems getting finance	32,1	29,0	27,2	39,1	24,0	28,2	28,9	19,4	20,8
Another job or business opportunity	4,3	6,8	6,0	0,9	6,0	5,4	2,9	3,2	6,9
Exit was planned in advance	2,7	1,0	0,0	0,0	0,0	0,8	1,8	0,5	3,4
Retirement	23,1	0,0	0,0	2,1	1,9	0,0	0,1	0	1,2
Personal reasons	14,7	21,7	21,0	15,5	15,6	19,8	23,2	19,9	16,9
Incident	0,9	3,5	6,4	1,9	0,4	0,6	3,9	9,21	7,08

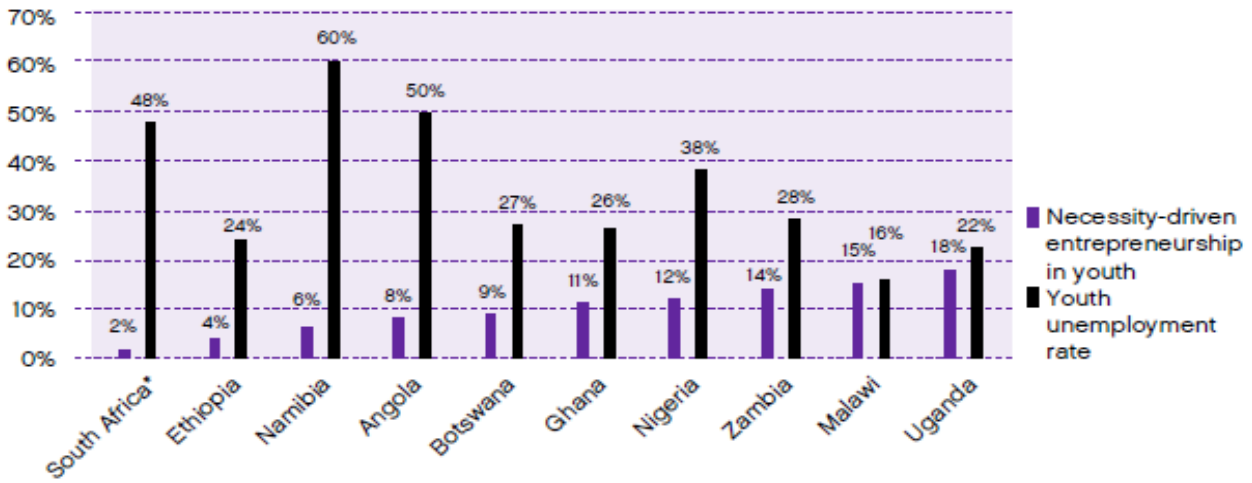
(Source: Harrington *et al.,* 2014:28)

The ability to remain in business over the years even against the tide can count as a success measurement for an entrepreneur as also shared by (Millán *et al.*, 2014).

III) The ability to create jobs

South Africa has extremely high official rates of youth unemployment, ranging from almost two-thirds (64.5%) of youths between the age of 15 and 19 years to over 27.5% for those between 30 and 34 years. As indicated in the graph below on Table 2.3, with an average unemployment rate of 48% South Africa is third highest in Africa (Xavier, Kelley, Herrington & Vorderwulbecke, 2012).

Table 2-3: Unemployment rate in selected African countries



* *Read as: 2% of South Africa's youth population are driven into entrepreneurship through necessity, with South Africa's youth unemployment rate at 48%*

The measure of success in this regard would reduce unemployment through creation of jobs. According to Xavier *et al.* (2012), one of key contributing factors to lack of job creation in South Africa is government's grant system. The welfare status tag on the South African economic environment, takes away the incentive for entrepreneurship activities in turn causing high unemployment (Xavier *et al.*, 2012). In 2014 during its campaign manifesto the ANC government made a commitment to create six million jobs. The questions which arose were around the permanence and sustainability of these jobs (GEM 2013).

IV) Ability to survive as an employer

Research by Folly (2006) suggest that it is difficult to give a one size fits all definition for entrepreneurial success. This emanates from the notion that economic success alone is not the best measure of success, especially in community based enterprises. The argument is that for small indigenous entrepreneurs survival is important and if the enterprise survives for more than one year it is considered to be successful (Folly, 2006). The ability to survive as an employer is a key tenant in the evaluation of entrepreneurship success. Unlike the other three tenants the ability to survive as an employer according to Ciavarella, Buchholtz, Riordan, Gatewood, and Stokes, (2004) is hinged on the personality of the entrepreneur. The attributes, emotional stability, agreeableness, conscientiousness and openness all these provide the measure of the entrepreneur's personality to handle any challenge for survival (Ciavarella *et al.*, 2004). In order to survive as an employer the entrepreneur needs to be emotionally stable as indicated by Judge, Higgins, Thoresen and Barrick (1999). Entrepreneurs who are low in emotional stability are always succumb to stress and tend to have sustained periods of depression, anxiety and irritability. This also increases the intentions to quit the business as they find it difficult to overcome challenges (Judge *et al.*, 1999). For entrepreneurs business volatility and worrying are part of the obstacles that are common in the environment and entrepreneurs who are not up to the task of maintaining optimism about the outcome of their business will negatively affect the success of the business (Vesper, 1990). It is therefore of paramount importance that one of the key measurements of entrepreneurial success should be based on the ability to survive as an employer.

There are other factors that contribute to the ability to survive as an employer which researchers have also assessed. The available funding mechanism plays a key role in

the survival of entrepreneurs. The ability to use, account and save the funds for the future even furthers the success story of the entrepreneur. It is with this thought that a consideration of how entrepreneurs use and apply financial applications in managing their companies has to be interrogated, starting with the literature available on the subject of financial applications.

2.4 Financial applications

Financial applications are financial management tools used in planning, budgeting, accounting and decision making within a business to meet current market dynamics and the constant changes of the competitive business environment. According to (Megginson *et al.*, 2010), financial management brings together a set of activities that are involved in the management of cash flow in a business (Megginson *et al.*, 2010). These activities boarders around the following functions, keeping financial records, paying employees and suppliers receiving payments from customers, borrowing, purchasing assets, selling of inventory and profits distribution (Rootman & Krüger, 2012). Many entrepreneurial companies in South Africa are managed with minimum use of financial tools or applications. This view is supported by Perks and Smith (2008), when they agree that most small business owners or managers in south Africa often lack business skills, critically so financial skills.

In financial markets informational asymmetries are usually pronounced. This is to help investors to make informed decisions. Those who are borrowers typically know their collateral, industriousness and moral rectitude better than those who do the lending. The understanding of financial functions and the use of Financial applications has a huge bearing on profit maximization and value creation for the business (Gitman & Zutter, 2012).

Financial Applications guide the way in which the objectives of the business can be achieved. In other words, these applications are a declaration of what has to be done now and also in the future. According to (Gitman, 1997) the applications are an important part of business financial management systems as they form part of financial plans and budgets that are used to strengthen the achievement of the set objectives (Gitman, 1997). The absence of these tools has a negative effect on the long term to the entity and it is the reason why many entrepreneurial establishments collapse due to financial difficulties. The success of the business, the performance and its long term

viability depends on the decisions that are taken by management, each of these decision have a huge economic impact. Financial applications plays an integral part in integrating the decisions of management together with investment opportunities to achieve set objectives (Gitman, 1997).

2.5 Advantages of using financial applications for entrepreneurs

According to Gitman (1997), financial applications serve as a script that help in the preparation of short term entrepreneurial obligations and as well as long term obligations. The applications help put the financial plans of the entrepreneur into perspective ranging from budgeting to capital expenditure (Gitman, 1997).

Firer *et al.* (2008) also share the view that financial applications help put in place guidelines for an entrepreneur such as:

- The identification of the entrepreneur's financial goals,
- An analysis of the difference of those goals against the entrepreneur's prevailing financial situation.
- Action plan to be taken in response to the situation
- Keep a clear records of the company's performance

These, together with a well detailed financial plan, helps to evaluate the performance of the entrepreneur, the adjustments and projections the entrepreneur needs to make vis-a vi the internal and external atmosphere of the organization (Firer *et al.*, 2008).

Financial Applications are critical to any entrepreneur as they help with monitoring progress and trends of operations. According to Brealy and Muers (1998), financial applications are central in financial planning. They also identify two factors that are related to financial planning which are of great importance to an entrepreneur.

- With the aid of financial application the planning process imposes the agents to project the conjugated effects of all the decision pertaining to investment, methods of financing of the business and also guide on the possible events that could directly or indirectly affect the business, as well as way to mitigate risk and taking advantage of opportunities (Brealy & Muers, 1998).
- With the aid of Financial Applications entrepreneurs are able to manage and interpret information accurately (Brealy & Muers, 1998). As the world stands, the

speed at which business information is moving is uncontrollable. In order to stay on top of the game financial information should always be readily available. This help entrepreneurs make informed decisions and avoid making mistakes.

2.6 Examples of financial applications

There are many financial applications that can be used in businesses at different levels depending on the size of the business. These ranges from computerized models to simple excel spread sheets for small businesses to large enterprises. Some of the applications that can be used by the entrepreneurs to achieve success are, but not limited to:

- Capital Asset pricing Model
- The capital budgeting applications
- Financial Accounting applications

There are diverse types of financial applications which can be used by different entrepreneurs, and these change according to the complexity level of the activities within the organization. These applications and many other can be tailor made to suite the size and the needs of the businesses which change from being generic that possess single basic planning guidelines up to sophisticated one with multiple functions (Firer *et al.*, 2008). The responsibility of these applications is to help business acquire funds to enhance trade as well as make key financial decisions to execute smooth operations (Brealey *et al.*, 2009).

2.6.1 Capital Asset pricing Model

This application helps companies to establish the cost of capital that is the required rate of return. The challenges that entrepreneurs face are the ability to predict the future and manage the risk that is associated with each investment. This application can go a long way to assist investors and owners of business uncertainty in their businesses by quantifying systematic risk and to determine the rate of return the investor can expect to receive as compensation for carrying the risk (Megginson *et al.*, 2010). The capital asset pricing application can assist entrepreneurs to diversify their investments so as to avoid total collapse of the business.

This application uses a factor called beta to determine the sensitivity of an investment's return against the overall market return. The overall market scale of beta is 1.0 (Megginson *et al.*, 2010). For an investment to be considered below average in terms of systematic risk it needs to have a beta of below 1.0, if the beta is above 1.0 that investment is considered to be above average systematic risk. The implication for the entrepreneur on this is that high beta investment increases the systematic risk exposure of the business portfolio, whereas the low beta investment effectively reduces the risk exposure (Megginson *et al.*, 2010). The understanding and use of this model is important to an entrepreneur as it gives insight before putting his investment in a particular business. Some businesses offer quick high returns on investments from a laymen's point of view, but the risk that is associated with that high returns cannot be simply visible to an entrepreneur, hence the need to use the capital asset application to measure that volatility.

2.6.2 Capital budgeting model

Capital budget application is essential for entrepreneurs and all who are in business as lies at the centre of critical decision making of which project or business venture a company should embark on. This application focuses on assisting companies in coming up with significant outlays on activities that have long term implication such as growth or expansion decisions, the type of equipment to invest in for the business and also critically the methods of cost reduction which the company can apply. All this put together is dependent on analysis of the cost and cash flows generated by that venture or project (Graham *et al.*, 2003).

The process of this application starts with the company searching and identifying an investment opportunity. Secondly there is need for extensive collection of data, this implies that no entrepreneur will just throw themselves in the deep end of a business without doing an exhaustive research on the investment opportunity (Megginson *et al.*, 2010). In order to achieve the best investment opportunity that will give birth to entrepreneurial success the criteria indicated in the figure 2.1 below must be followed. The figure 2.1 below touches on the best investment decision that an investor or entrepreneur has to make, based on the use of the financial applications to analyse the envisaged growth, profitability as well as sustainability of the business.

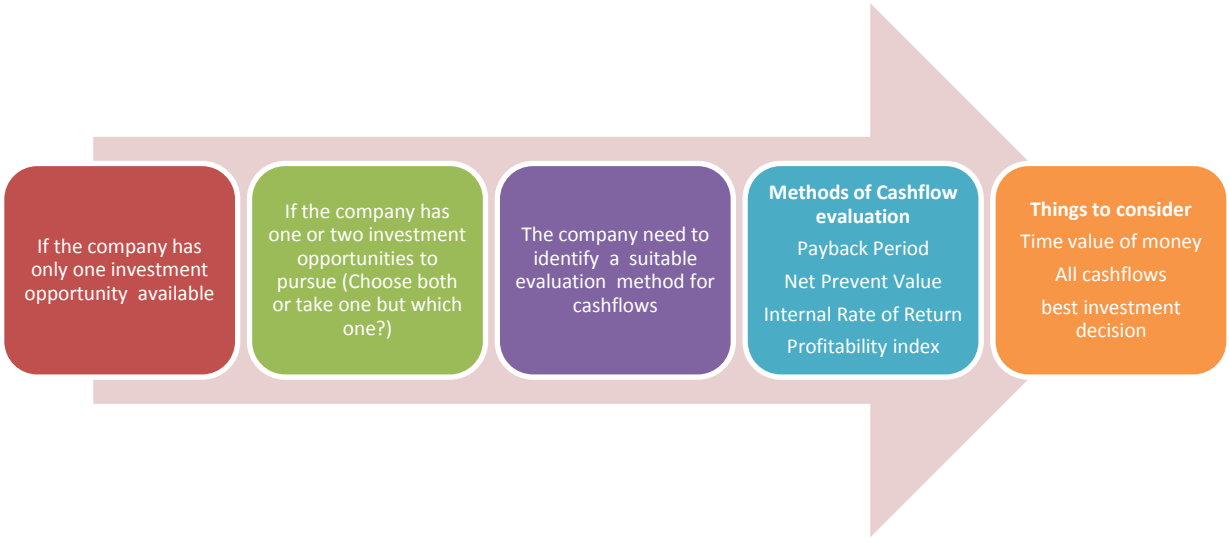


Figure 2-1: Financial application investment criteria

It is expected that almost all companies must achieve profitability in order to survive. This cannot be simply attained by looking at the net profit. The company who need to use financial applications, then will be judged for its ability to meet its debt obligations (Ned *et al.*, 1997).

2.6.3 The Payback application

The payback application according to Megginson *et al.* (2010) refers to the amount of time the firm will take through its cumulative cash flows to recoup its initial investment. A company that prefers to make use of the payback approach has to define its parameters in terms of maximum number of payback years. The thinking behind this is that if a company is set to payback an investment in five years any proposal beyond five years cannot be accepted (Megginson *et al.*, 2010). Financial research over the past five decades has recorded how many businesses used capital management methods to determine the cost capital used in capital budgeting decisions. There has been no full conscientious on the best choice application to deal with capital budgeting. However it is evident that the payback application is the most preferred technique in capital budgeting (Pike, 1996), (Schall *et al.*, 1978). The idea could have been that the payback application lack financial sophistry as well as the limited use of computer technology (Schall *et al.*, 1978).

The payback method is regarded as the simplest of all capital budgeting decision making applications, this application is very popular with small companies as they try to

avoid investments which cannot pay for itself. Most small companies and other entrepreneurs operate on a limited budget, due to the fact that they tend to align with the payback application because it is easy and it allows them to receive more cash flow sooner and therefore giving them financial flexibility (Megginson *et al.*, 2010), (Ryan, 2007). Some of the arguments for the use of the payback application by companies are to minimize the risk exposure. Financier have concluded that projects that take long to pay off are riskier in the sense that forecasting errors tend to increase as the payback time increases (Megginson *et al.*, 2010). In highly volatile political environments and unstable economies the payback application is preferred as it gives the investor specific time to implement the project and move. There are many reasons that support the payback technique but the most critical for any company is its ability to repay its debt and focus on other investment opportunities as a way of growing the business (Megginson *et al.*, 2010). An example of a payback financial application technique is shown below. The investor wishes to invest in a business that can quickly stand on its own and promotes the company's liquidity.

Example: Supposed we have a R100 000 investment and the following cash flow for two alternatives. The payback application selects the one that will recover the invested money faster than the other, according to the payback method in the table below. The company would settle for investment A.

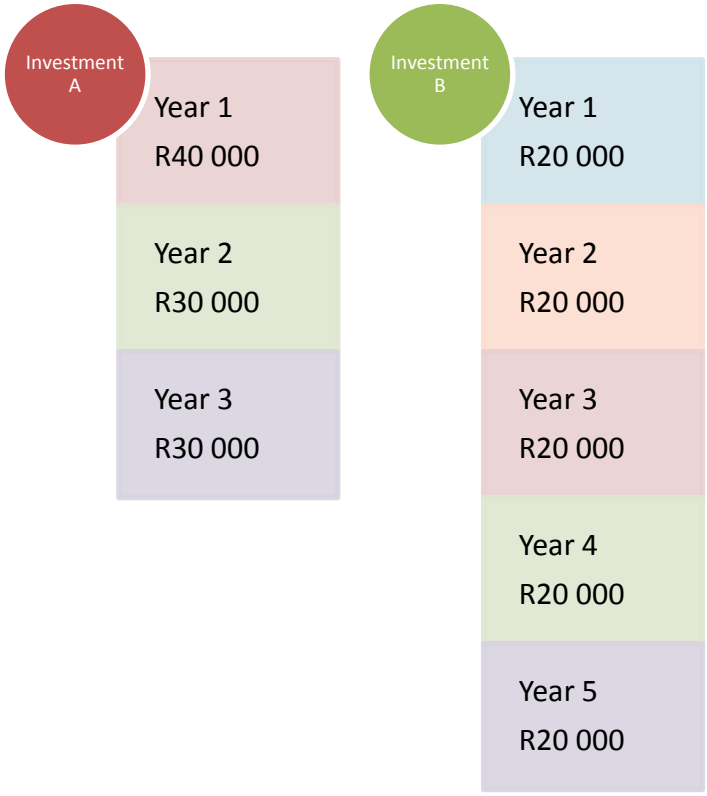


Figure 2-2: Payback application

However the payback application is not without flaws. According to literature as submitted by Megginson *et al.* (2010), the arguments against payback application is that the payback cut off period does not connect with the maximization of the owner's value. It also does not articulate the risk issue clearly. It is known that the higher the risk the higher the returns. The payback simply reject an investment based on the time it will take to recoup even if it offers higher returns at the end (Megginson *et al.*, 2010). Therefore as much as it works for small companies it may not serve as the best application for the company's growth and profitability.

2.6.4 The Net Present value (NPV) application

The Net present value technique is a capital budgeting method that present the expected rand amount that owner's wealth would increase or decrease upon acceptance of a project (Pike, 1996). Net present value is defined as the present value of future cash flows minus the initial investment that the shareholders up (Graham *et al.*, 2003). It assumes at a discounted rate that is consistent with a project's risk the project's NPV is equal to the sum of its cash inflows and outflows (Megginson *et al.*,

2010). The ultimate goal of every company is to maximize shareholder's wealth. The NPV is capital budgeting analysis application which is able to determine the profitability of a projected investment or project.

The NPV application is able to address all the challenges that are faced by the payback technique. NPV has the ability to offer proper adjustments for the time value of money, it also clarifies on whether to invest or to refrain by identifying positive and negative NPV (Megginson *et al.*, 2010).

Figure 2.3: NPV equation

$$NPV = \sum_{t=0}^{n} \frac{CF_t}{(1+r)^t}.$$

Where: CF_t = net cash inflow during the period t

n= number of periods at maturity

r = discount rate

t = number of times periods

Source: (Megginson *et al.*, 2010)

According to this method, the positive present value represents a profitable project as it assumes that the projected earnings will be exceeding the anticipated cost (Investopedia). The figure 2.4 below shows an example of a good or a bad investment that a company or an entrepreneur can make.

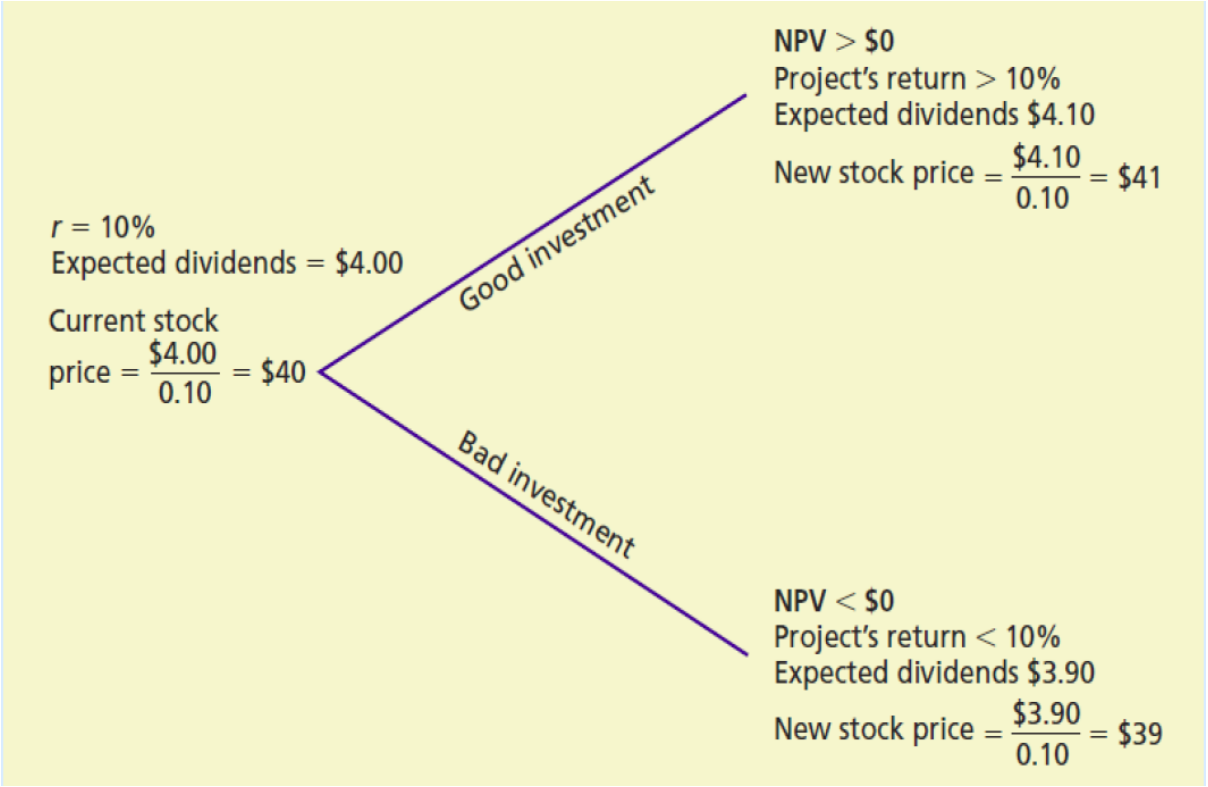


Figure 2-3: Example of good or bad investment decision

(Megginson *et al.*, 2010)

2.6.5 Profitability index

Finally of some of the applications that can be used by entrepreneurs within their companies to make informed decision that will address issues around growth, sustainability, profitability as well as job creation, is the profitability index. This is a stipulation that gives guidance as to whether the company should proceed or stop a project or investment (Investopedia). According to Megginson *et al*., (2010), the principle to apply when evaluating an investment under the profitability index is to only consider an investment when the PI is greater than 1. In the case the inflow has to be more than initial cash outflow.

The Formula for calculating the PI is given below as well as an example from (Megginson *et al*., (2010:257) on evaluating the profitability index.

$$\text{Profitability Index} = \frac{\text{Present Value of Future cash flows}}{\text{Initial Investment}}$$

According to the investopedia website risk as far as business investment is concerned is an unplanned outcome on an investment as compared to the expected. It presents a possibility of losing some or even all of what the company has invested.

In considering applications for funding, the banks and other finance houses should weigh the financial risk in their risk analysis, as well as the criteria that are cost-effective and offer incentives (Nieuwenhuizen & Kroon, 2003).

2.6.6 Accounting applications

The role of accounting is unquestionable in any business or company. The primary objective is to provide financial information for the entrepreneur or manager in regard to the operation of the business (Reeve *et al.*, 2012). There are many accounting applications used to present financial information, these range from excel spread sheet to complex computerized applications. Their main function is to record all the activities of the business, to control the movement of resources in and out of the business. In order to accomplish this, the accounting applications and take two forms (Hall, 2007):

(i) the computerized system which requires information to be implemented in the system and it generates reports for the user or,
(ii) The manual system that requires manual record keeping of books for all the activities of the business.

These two accounting applications are still in use even now; however the first is more acclimatized with modernity. The globalization of the world has caused rapidness in the movement of goods and services. This requires faster equipment that can respond to the needs of business. Tijani & Mohammed, (2013:13) concur by stating that “the development in information technologies over the years is fast converting this hitherto luxurious business resource into a necessity”. The accounting financial applications play a pivotal role in transaction processing, on time balance sheet which enhances decision making for the entrepreneur (Alsharayri, 2012).

2.7 Summary

The aim focus of the researcher was to establish the basis for literature in as far as entrepreneurship is concerned. Further to that was to break down the tenants of

entrepreneurial success. It was also significant for the researcher to broadly define what financial applications are and also explore their role in enhances the tenants of entrepreneurial success.

This chapter has acknowledged the tremendous pace of change in finance management and business administration worldwide. Entrepreneurs as echoed by many scholars are the back bone of any meaningful economic contribution in any country. It is therefore of paramount importance that entrepreneurs make use of modern day financial applications to aid then in budgeting, simple record keeping, financial and investment forecast as well as in preparing documents for further funding by banks or other investors.

CHAPTER 3. RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In chapter 2, the literature review focused on defining entrepreneurship and its contribution to the economic development of a country. In looking as this subject the literature review extracted and analysed tenants that defines entrepreneurial success, such as maintained positive earnings, survival in business, job creation and ability to survive as an employer. Realising that entrepreneurship success cannot carry the day without the understanding and use of financial applications to achieve success.

The literature review also includes the definition of financial applications, giving examples of these and how they contribute to financial and investment decision making of the company to achieve success.

This chapter purpose is to elaborate on the research methodology used in the study. Emphatically the following issues will be considered: the research question, scope of research, aim of the research, research methodology, sampling strategy, research instrument, questionnaire, analysis of data, research procedure, ethical considerations as well as potential biasness.

3.2 Research question

The entrepreneurial success factors which were established in the literature review (Chapter 2) assisted in compiling the research question, aimed at addressing the following questions:

- **Do entrepreneurs in South Africa from identified companies use financial application to raise capital, make business decisions and achieve entrepreneurial success?**

In trying to answer the question above the literature study (Chapter 2) identified what financial applications are and how they help companies in making investment decisions on capital budgeting, cash flow management as well as investment payback period.

The literature review also focused on assessing the relationship between the use of financial applications, growth and sustainability of the company through managing risk

and returns which guided the research question aimed at addressing the following question:

- **Is there a relationship between entrepreneurs making good business decisions, achieving success and the use of financial applications?**

In order to answer this question the study looked at the advantages that come by use of financial application in decision making both to minimize risk and achieving high returns.

3.3 Scope of research

The research scope is focused on identified entrepreneurs established companies and the study is limited to South African established entrepreneurs. The definition of entrepreneurship is already giving in chapter 2 by (Thurik & Wennekers, 2004). The clusters of people who run such companies provide our population for the study. According to Welman, Kruger and Mitchell (2005:52), “population consist of individuals, groups, human products and events or conditions to which they are exposed”. This is supported by Zikmund (2003) who defines population as group of entities that have an identical course of action with the same characteristics.

Due to the sensitivity and confidentiality of companies’ financial status the identity of the companies or individuals linked to the companies could not be divulged. This was to trigger convenience and willingness of the companies to participate honestly in the study knowing that they would be no victimisation of their business. A convenience sample is that which is chosen when the units of study are accessible to the researcher and willing to participate freely (Black, 2010).

In this study, the convenience sample comprises of individual entrepreneurs and company managers who are employed by entrepreneurs and are willing to participate in the study. The survey covers spheres of business from retailing, construction, art and craft to welding and main other.

This study does not start with a specific problem but seek to find the problem in the world of entrepreneurship in South Africa. This makes the research in the study to be exploratory in nature (Welman *et al.*, 2005).

3.4 Aim of the research

The aim of the research is exploratory in nature. The research will not make any modification to the situation under investigation, but it will however point out the relationship that exists between the use of financial applications and entrepreneurial success.

- To establish whether entrepreneurial companies' growth is linked to the use of financial applications.
- To establish whether the use of financial applications has an impact on the profits of entrepreneurial companies.
- To establish whether the use of financial applications can assist companies to prepare for unforeseen economic meltdown.

3.5 Research methodology

The research is quantitative using exploratory factor analysis, which will involve statistical analysis. The survey method for data collection and analysis used is numerical and quantitative which means data must be produced from the study population (Fowler Jr, 2002). The study is on the whole of South African entrepreneurship community but focused on a number of companies across the land. The research technique in which information is gathered is through a questionnaire that has been distributed through the innovative modern day technology the survey monkey to cover the selected companies around South Africa.

This quantitative research is advantageous as it is considerably inexpensive, quick and precise and also its ability to cover a number of participants in the selected population. However regardless of the number of targeted participants those who actually respond may be very few, which is a disadvantage for the research (Zikmund, 2003).

3.6 Sampling strategy

The sampling strategy is a "standardised set of goals and conditions that provide for correct sample design, correct sample collection and correct special assessment" (Myers 1997:443).The convenience sampling method will be utilised. As supported by (Myers, 1997) cough out convenience sampling gives way for gathering information that is of particular interest throughout the research.

3.7 Research instrument

The research instrument which is a questionnaire was developed by the researcher. The questions were formulated in line with the gathered literature on entrepreneurship, use of financial applications and also entrepreneurial success.

The structuring of the questions is such that it does not inconvenience the respondent. The closed ended style which allows for a variety of responses informed the construction of the questions. This style allows for easy evaluation and grouping of information from respondents through a check list and rating scale as advocated by (Leedy & Ormond, 2005). The checklist consist of the respondent's characteristics and basic history, whereas the rating scale consists of attitude, impact of the issues under investigation, evaluated on a scale of 1 – 5 ranging from strongly disagree to strongly agree.

3.8 The questionnaire

The questionnaire was constructed around the literature review in chapter 2. The questions were formulated in order to establish whether a relationship exist between the use of financial applications and entrepreneurial success. The questionnaire is divided into the following sections.

- Section A: Demographic information
- Section B: Financial applications awareness
- Section C: Knowledge and use of financial applications
- Section D: Ability to generate positive income
- Section E: Ability to expand and create employment
- Section F: Ability to survive during economic meltdown
- Section G: General support from stakeholders

3.8.1 Section A: Demographics questions

This section is dedicated to the demographics, which establishes the basic knowledge about the entrepreneur, highlighting the industry, the level of education, race and the number of years in business among other basic information. The information is relevant to gauge the different types of entrepreneurs in South Africa. Q6 is important for the research as it shows the maturity of the entrepreneur in the business.Q7 gives an

indication of the size of the business. Q6 and Q7 can help establish whether the organisation is growing or stagnant. Q8 helps to identify the different industries under which entrepreneurs are performing exceptionally well and those under which they are struggling.

3.8.2 Section B: Financial application awareness

Q1 and Q2 of this section interrogate the entrepreneurs about their awareness of the different financial applications available and also inquire if any of the entrepreneurs have used these in any of their operations.

3.8.3 Section C: Knowledge and use of financial applications

This section seeks to establish the respondent's knowledge of different financial applications and their use within the business. It also establishes the value financial applications have towards decision making.

3.8.4 Section D: Ability to generate positive income

As a means of evaluating the ability of the entrepreneur to generate positive income, this section seeks to show the relationship that exist between the use of financial applications and positive income generated by the business.

3.8.5 Section E: Ability to expand and create employment

Questions on this section are designed to show the growth of the entrepreneurial business by use of financial application. This growth is also evaluated in terms of the business ability to create employment.

3.8.6 Section F: Ability to survive during economic meltdown

This section interrogates how entrepreneurs in their different business ventures use financial applications to mitigate risk that is associated with economic meltdown. The questions examine the relationship between the use of financial applications and the entrepreneur's ability to predict future positive and negative events in the economic environment.

3.8.7 Section G: General support from stakeholders

This is a general section which is meant to gauge the relationship and support that is rendered by all stakeholders in developing and growing entrepreneurs. This spans from government to financial institutions.

3.9 Data analysis

The data that has been gathered from the sample of respondents is captured in the excel spread sheet and analysed. The key analysis of the data analysis is broken down from complex to smaller units which allows for better understanding of the information (Ghauri & Gronhaug, 2005). The Statistical Programme for Social Sciences (SPSS) has been used to analyse the data gathered. For each section there is an analysis using frequencies tables and graphs. The test was carried out to validate the suitability of the dataset for the exploratory factory analysis to assess the relationship between the use of financial applications entrepreneurial success.

To assess the strength of the inter-correlation between the variables and the factorability of the data, two statistical measures were used. The Bartlett's test of sphrericity and the Kaiser- Meyer-Olkin (KMO) measure of sampling adequacy.

3.10 Research procedure

A questionnaire was distributed on survey monkey through email so as to reach a large number of entrepreneurs across South Africa. A total of 150 hard copy questionnaires were also distributed between Potchefstroom and Johannesburg areas. The questionnaires were accompanied by a cover page which gave a preview of the study, ascertained the confidentiality and the name of the student and supervisor.

3.11 Ethical considerations

Ethical considerations were taken into account as this is critical for any human study (Leedy & Ormond, 2005). The participation in this research was voluntary. There was no forcing or threatening of participants to complete the survey questionnaire against their will. As stated in the cover letter the participants were assured of confidentiality. Since this research bordered around financial issues, participants were informed not to provide any financial figures of the performance of theirs business. To add on, the

privacy of the participants was guaranteed as they were not required to provide names, addresses or contacts to the researcher.

CHAPTER 4. RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the data obtained from the questionnaires. This information will be presented in tabular format, for example frequency tablets as well as in graphs.

There are no errors on the dataset after the inspection of the descriptive statistics of the variables. Kaiser-Meyer-Olkin (KMO) and Bartlett's test of Sphrericity was used.

The KMO statistic varies between 0 and 1 and KMO overly should be 0.50 or higher to perform a satisfactory factor analysis.

To measure the reliability the Cronbach alpha was used, the scale for this measurement ranges from 0 to 1.The more the figure is closer to one the more reliable the data is. It also shows the inter-relatedness of the items under analysis. In essence the Cronbach alpha gives an indication of the correlation that exist in the grouped items (Mohsen & Reg, 2011).

The research seeks to establish if a relationship exist between the financial applications and entrepreneurial success. The model below depicts the relationship intended to be established by the researcher.

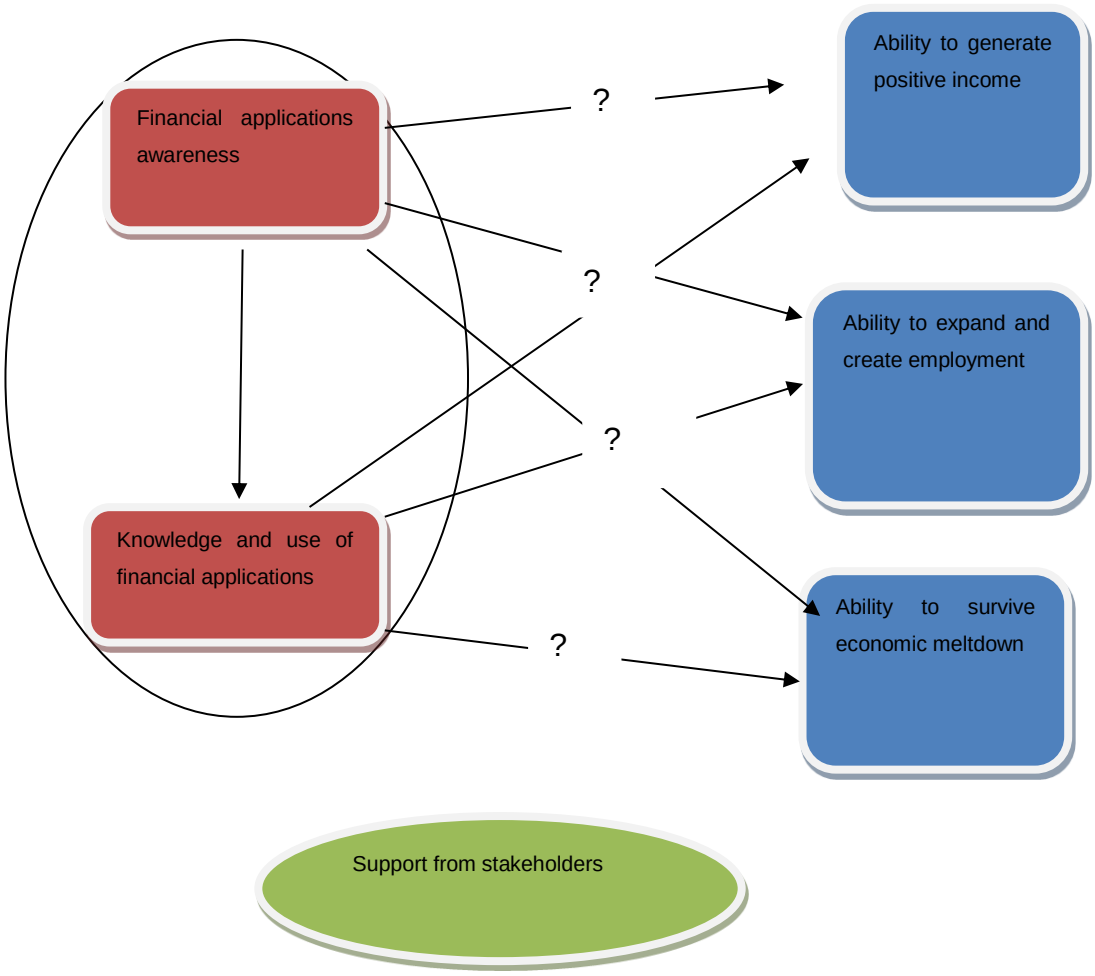


Figure 4-1: Model to describe the relationship between financial applications and entrepreneurial success

4.2 Response rate

The researcher distributed 150 hard copies of the questionnaires to individuals and also distributed 262 questionnaires through email to different entrepreneurs across the country. Of the 150 hard copies questionnaires distributed a total response of 113 was received over a period of one month, this represent a response rate of 75%, and from the 262 questionnaire sent through email only a total of 28 responses were received making a response rate of 11%. Therefore the total questionnaire distributed to voluntary participants amounted to 412 with a total of 141 responses, giving us a response rate of 34%. The response rate from emailed questionnaires was expected.

4.3 Demographics statistics

The **table 4.1** below gives a summary of demographics up to enthnicity. The results show that more males (59.6%) are engaged in entrepreneurial activities as compared to females (40.4%) On the age generation that is dominant in entrepreneurship the age group 36-45 years is leading with percentage representation of 39.0% of the sampled population. The nationals that are activily involved in entrepreneurial activities are mainly South African, of the sampled population (78.7%) are South africans and there is almost an even distribution between black population (44.6%) and white population (40.0%).

Table 4-1: Respondent characteristics

Variable	Frequency [N(%)]
Gender (N=141)	
Male	84 (59.6)
Female	57 (40.4)
Age (N=139)	
≤25	11 (7.8)
26-35	40 (28.4)
36-45	55 (39.0)
46-55	24 (17.0)
56-65	7 (5.0)
≥66	2 (1.4)
Nationality (N=141)	
South African	111 (78.7)
Non-South African	29 (20.6)
Ethnicity (N=141)	
Black	62 (44.0)
White	60 (40.6)
Coloured	9 (6.4)
Other	10 (7.1)

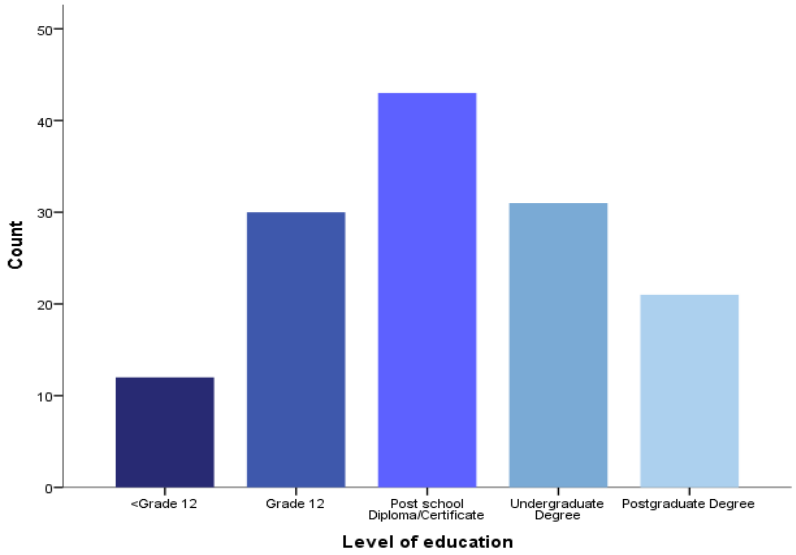


Figure 4-2: Entrepreneurs level of education

The figure 4.2 above shows the level of education most entrepreneurs falls within. The indication is that most of them have post school training in the form of a diploma or a certificate. Most of the entrepreneurs who participated in the study have a post school diploma or certificate with a percentage of 30.5%.

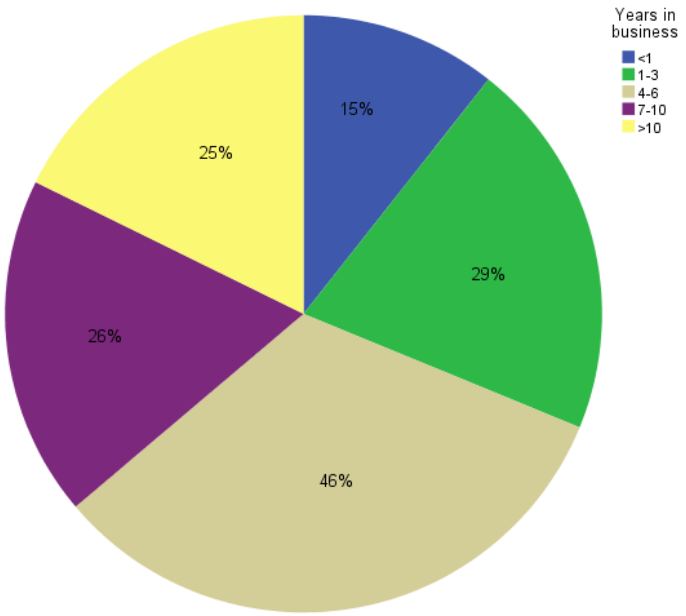


Figure 4-3: Entrepreneurs years in business

The figure 4.3 above shows that the majority of the entrepreneurs are between 4 to 6 years in business. This is represented by 46% as indicated in the pie chart above. This can be tied together with the age group analysis in table 4.1 above. The table shows

that most of the entrepreneurs are aged between 36-45 years. This tallies well with an average of 4 to 6 years in business.

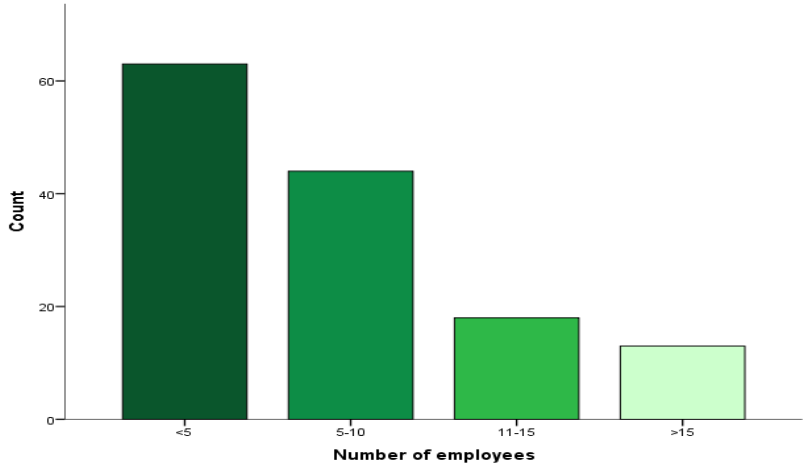


Figure 4-4: Number of employees per entrepreneur

As shown in figure 4.4 above it is clear that most entrepreneurs are still operating on a very small scale. The sampled population indicate that most entrepreneurs are employing less than five people with 44.7% employing less than 5 employees.

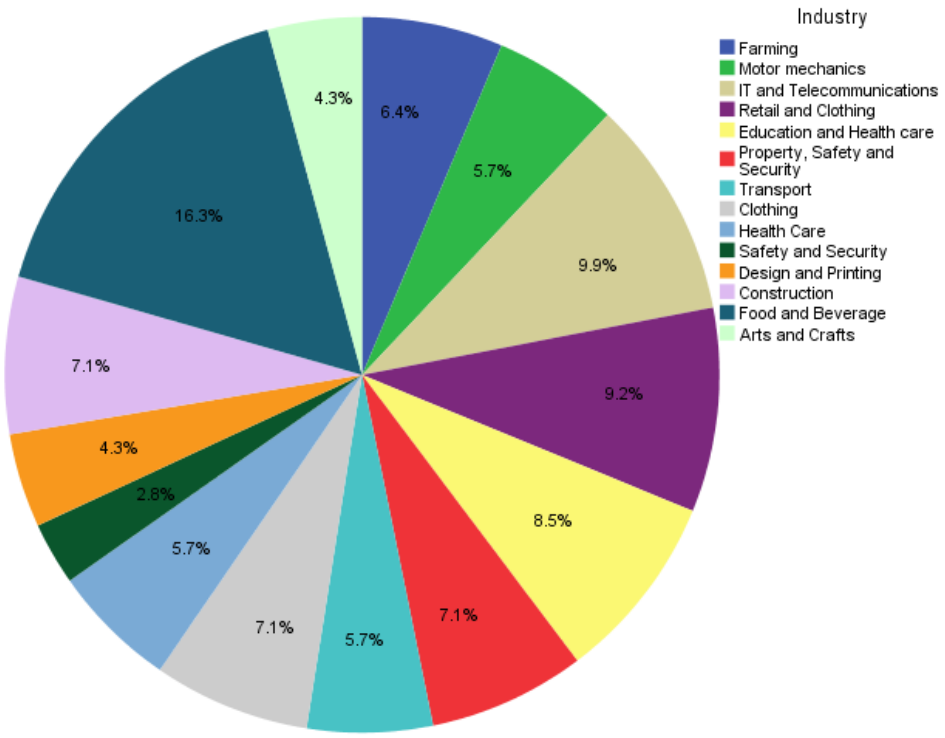


Figure 4-5: Industry occupied by respondents

The results in figure 4.5 above also indicate diverse industries that entrepreneurs are involved in but the leading one for the surveyed populations is food and beverages with 16.3%.This could be that there is no much costly training in starting this business.

4.4 Descriptive statistics

The table 4.2 below shows descriptive statistics from different sections of the questionnaire in the sampled population. The responses ranged from minimum 1 to maximum 5 with a different number of respondants for each section.

Table 4-2: Mean and standard deviation of the variables

Descriptive statistics	Number	Minimum	Maximum	Mean	Standard Deviation
Financial application Awareness (Section B)	139	1	5	3.1601	1.0514
Knowledge and use of financial applications (section C)	134	1	5	2.78	.964
Ability to generate positive income (Section D)	124	1	5	2.88	.838
Ability to expand and create employment (Section E)	123	1	5	2.90	.850
Ability to survive during economic meltdown (Section F)	121	1	5	3.04	.867
General support from stakeholders (Section G)	129	1	5	2.59	.938

4.5 Confirmatory factor analysis: Validity and reliability

Taking the above test applied on table 4.2 of the descriptive statistics, it can be confirmed that the data passed the tests which provide a minimum standard that should be passed before a factor analysis could be conducted. In order to verify the validity of our data, the Kaiser-Meyer-Olkin and Bartlett's test was used to measure sampling adequacy. The table 4.3 below the KMO measure of sampling adequacy is satisfactory for all the sections. The dataset analysed in the table below also prove that the requirements of factor analysis have been met. This is indicated by the level of significance of the Bartlett's test which shows a probability of less than 0.05 across the sections.

To measure reliability the Cronbach alpha internal consistency coefficient was calculated. The test ranges from 0 to 1, with the level of alpha indicating how the items are correlated. The items in all sections have proved consistent with each other, they

are highly correlated. According to DeVellis, (2003) the ideal Cronbach alpha coefficient should be above 7. In this case the figure is way above 7 with average of .930 across all the sections. This strengthens the case of the reliability of our scale.

Table 4-3: Validity and reliability summary

	KMO measure of Sampling Adequacy	**Level of significance**	**Reliability (Cronbach Alpha)**
Financial application Awareness **(Section B)**	.924	0.000	.957
Knowledge and use of financial applications **(Section C)**	.882	0.000	.958
Ability to generate positive income **(Section D)**	.867	0.000	.959
Ability to expand and create employment **(Section E)**	.881	0.000	.932
Ability to survive during economic meltdown **(Section F)**	.880	0.000	.949
General support from stakeholders **(Section G)**	.919	0.000	.923

4.6 Total variance explained

The eigenvalues associated with each factor represent the variance explained by that linear component (factor) as shown on table 4.4 below. The principal component analysis works on the initial assumption that all variance is common, this implies that before extraction the communalities are all equal to one (Field, 2009). After extraction the result concluded that all variances are associated with the questions asked across all sections. The table below shows the different cumulative loading for each section and it reveals how factors are closely related in this study.

Table 4-4: Total variance explained using eigenvalues (Cumulative loading for each variable)

	Cumulative Loading (%)
Financial application awareness **(Section B)**	74.738
Knowledge and use of financial applications **(Section C)**	81.960
Ability to generate positive income **(Section D)**	83.289
Ability to expand and create employment **(Section E)**	74.532
Ability to survive during economic meltdown **(Section F)**	80.240
General support from stakeholders **(Section G)**	74.310

4.7 Correlations between constructs

Having proved above that our dataset is valid and also reliable. It is at this stage that the researcher analysed the relationship that exist between the different sections. As reported already on the descriptive statistics above, the data under analysis produced only one constraint which means there is a strong communality of the factors extracted. In this study there are two independent variables, which are financial applications awareness and the knowledge and use of financial applications.

Correlations seek to explore the relationship that exists among different variables. If the correlation coefficient value is negative it means there is a negative correlation between variables. However if the correlation coefficient is positive then it implies that there is a positive correlation between to variables. This is to say if positively correlated an increase or decrease in one variable will result in direct increase or decrease in another variable, but if the variables are negatively correlated an increase in one variable will cause a decrease in another variable (Pallant, 2010).

Looking at the correlation analysis result presented below, which were carried out using Pearson correlation the results show that the correlation coefficient between each pair of variables largely positively with average of around .65 across variables except for the relationship between all the variables with general support from stakeholders which is mild at average .35. It is also important to mention that the level of significance here is perfect for our study as indicated the confidence we derive from the results obtained.

It can safely be concluded that there is a positive correlation between the entrepreneur's financial application awareness, knowledge and use of financial applications, the ability to generate positive income, ability to expand and create employment, and the ability to survive economic meltdown. It is only with general support from stakeholder variable that the relationship is not that strong with the rest of the variable.

The outcome from the table below ascertains that the questionnaire sent out was well organised with a traceable theme across. This has also been supported by the descriptive statistics results.

Table 4-5: Correlations of variables under investigation

		FinAware (Financial Awareness)	FinUse (Financial usage)	Income	Employ	Survive	Support
FinAware	Pearson Correlation	1					
	Sig. (2-tailed)						
	Sum of Squares and Cross-products	15149.415					
	Covariance	124.176					
	N	123					
FinUse	Pearson Correlation	.648**	1				
	Sig. (2-tailed)	.000					
	Sum of Squares and Cross-products	4993.718	4403.108				
	Covariance	43.049	34.133				
	N	117	130				
Income	Pearson Correlation	.690**	.642**	1			
	Sig. (2-tailed)	.000	.000				
	Sum of Squares and Cross-products	4176.271	1990.527	2866.690			
	Covariance	39.399	18.262	24.928			
	N	107	110	116			
Employ	Pearson Correlation	.654**	.635**	.783**	1		
	Sig. (2-tailed)	.000	.000	.000			
	Sum of Squares and Cross-products	3916.020	1903.529	2104.373	2788.262		
	Covariance	38.772	18.847	20.835	26.304		
	N	102	102	102	107		
Survive	Pearson Correlation	.701**	.601**	.817**	.741**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	Sum of Squares and Cross-products	4458.000	1914.532	2347.000	2090.846	3065.965	
	Covariance	42.057	17.727	21.935	20.299	27.132	
	N	107	109	108	104	114	
Support	Pearson Correlation	.210*	.327**	.333**	.392**	.373**	1
	Sig. (2-tailed)	.035	.001	.001	.000	.000	
	Sum of Squares and Cross-products	1275.099	1065.710	889.845	1041.429	1073.202	3346.442
	Covariance	12.751	10.054	8.724	10.736	10.419	29.879
	N	101	107	103	98	104	113

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

*. Correlation is significant at the 0.05 level (2-tailed).

4.8 Regression analysis

For the sake of this research to be meaningful and bring out the issues that we wanted to establish from the beginning of the study, which seeks to establish if there is a relationship between financial applications and entrepreneurial success. It is not enough to leave our results at the correlation stage as this only show how the different variables relate with each other but not answering the question, since correlations don't prove a causal relationship. It is with this thought that a regression analysis had to be done. The table below should be the picture that guides the research. Needing to establish if there is a relationship between these independent variables (financial applications awareness and knowledge and use of financial applications) against the ability to generate positive income, ability to expand and create employment and ability to survive during economic meltdown. The general support from stakeholders stands as a moderating variable.

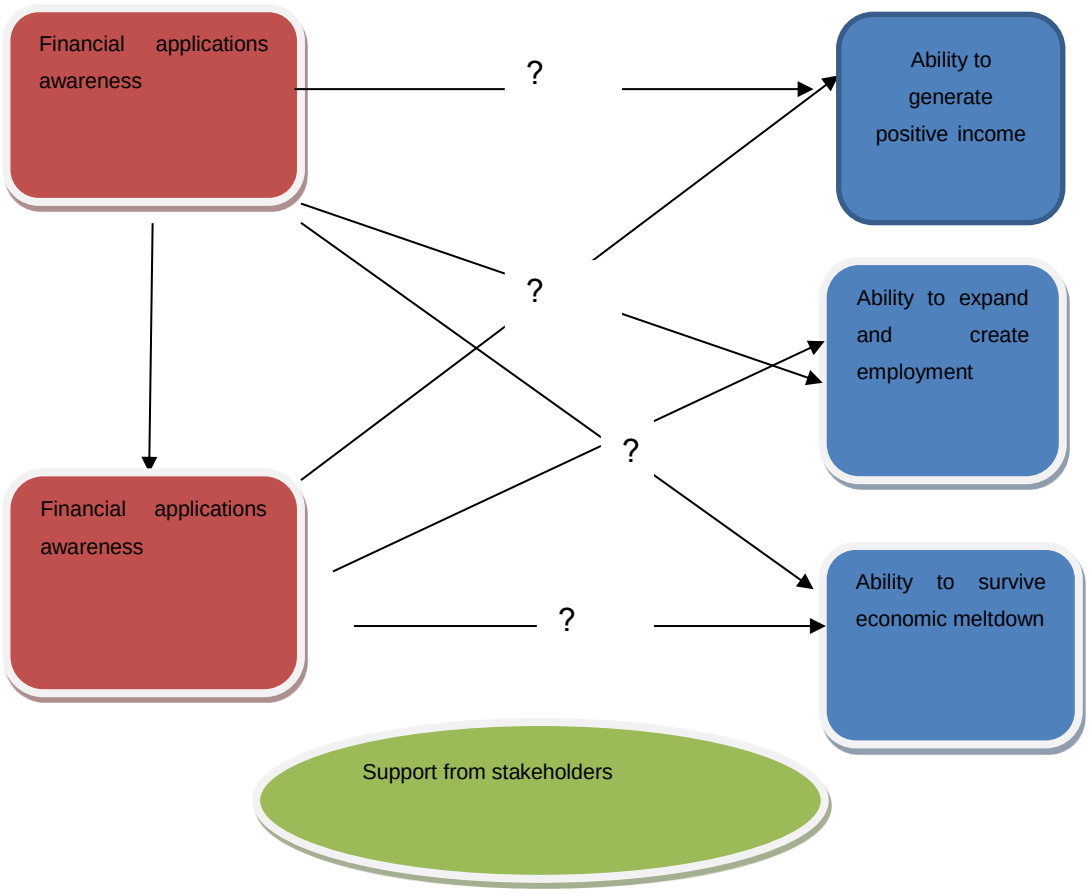


Figure 4-6: Model to describe the relationship between financial applications and entrepreneurial success

In oder to bring about the required results from the research these components of regression analysis were examined:

- Normality
- Linearity
- Homoscedasticity
- Independence
- Muilti Colliniarity

These all refer to the nature of the relationship between variables (Pallant, 2010).

4.9 Testing the relationship between financial application awareness, knowledge and use of financial applications against ability to generate positive income

Table 4-6: Model Summary: Testing independent variables against income

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736[a]	.542	.533	3.41271

a. Predictors: (constant) – FinAware, FinUse

The model summary table above tells how much of the variance in the dependable variable is explained by the model (Tabachnick & Fidell, 2007). From the results presented above R square explains .542 of the variance. Presented in percentage form this is 54.2% which is very significant is explaining the relationship from the model. Because the sample size is big enough the researcher will not report on adjusted R squared as this helps only when the sample size is small.

The relationship between the different and already tested constructs of entrepreneurial success were analysed by means of an Analysis of Variance (one way ANOVA). This will help determine if there is significant difference on the dependent variable by independent variable. The assumptions of normality and homogeneity of variance is also assessed. ANOVA is an inferential hypothesis testing method that test for equality of means across multiple samples (Wegner, 2007) .To assess the statistical significance of the results the ANOVA was used as indicated in the table below. This test the p-value by stating that null hypothesis R in the given sample is equal to zero. The results show

that the alternative hypothesis is true as significance is equal to zero which can be captured as p<.0005.

The *F-ratio* standing at 61.38% as shown below also indicates the ratio of improvement is coming up with results that are fitted to the model. This makes it better than using the mean.

Table 4-7: Testing the variability between independent variables and income using ANOVA

Model		Sum of Squares	df	Mean Square	F	Significance.
1	Regression	1431.092	2	715.546	61.438	.000[b]
	Residual	1211.248	104	11.647		
	Total	2642.340	106			

a. Dependent Variable: Income

b. Predictors: (Constant), FinUse, FinAware

4.10 Coefficients: Evaluating the independent variables

The table below shows that there is a strong relationship between the use dependent variable and the independent variables. In the case below. Using the standardised coefficients it can be concluded that financial application awareness has a 47.3% positive contribution to the ability of generating positive income for the entrepreneur which is very significant. Same applies for the knowledge and use of financial applications, this has a 33.6% positive contribution toward positive income generation for the entrepreneur. The researcher can safely conclude that these two variables make a strong contribution to explain the dependent variable.The percentage represented here shows to what extend or degree the independent variable affect the outcome if all other effects remain constant.

Table 4-8: Standardised coefficient analysis for positive income generation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.082	1.165		4.363	.000
	FinAware	.212	.039	.473	5.422	.000
	FinUse	.287	.074	.336	3.852	.000

4.11 Normality

The residuals are normally distributed as shown in the graphs below. All the points lie within reasonable distance with the straight diagonal line. This proves that there is not major deviation normality.

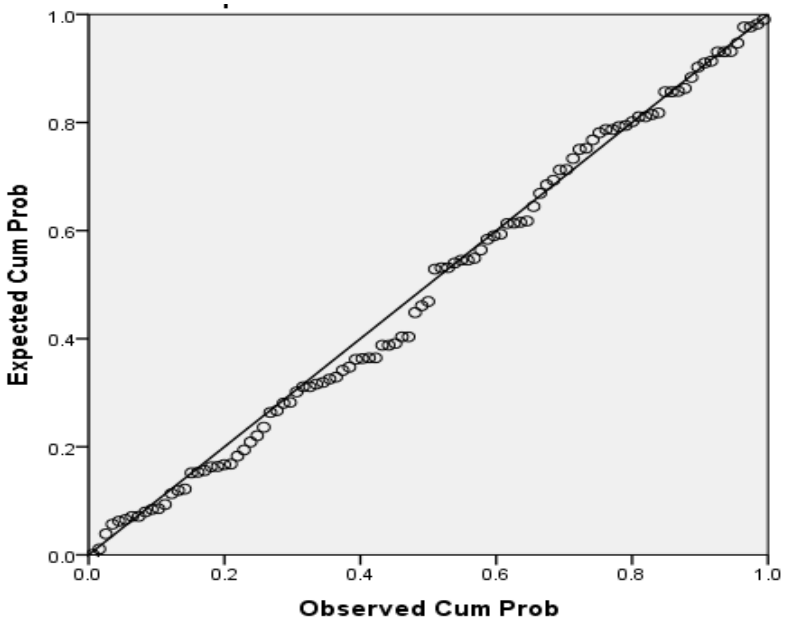


Figure 4-7: Normal P-P plot for the dependent variable (Income)

The histogram figure 4.8 below also presents the normal distribution of residual. This confirms the normality of the sampled data as presented on the normal P-P Plot.

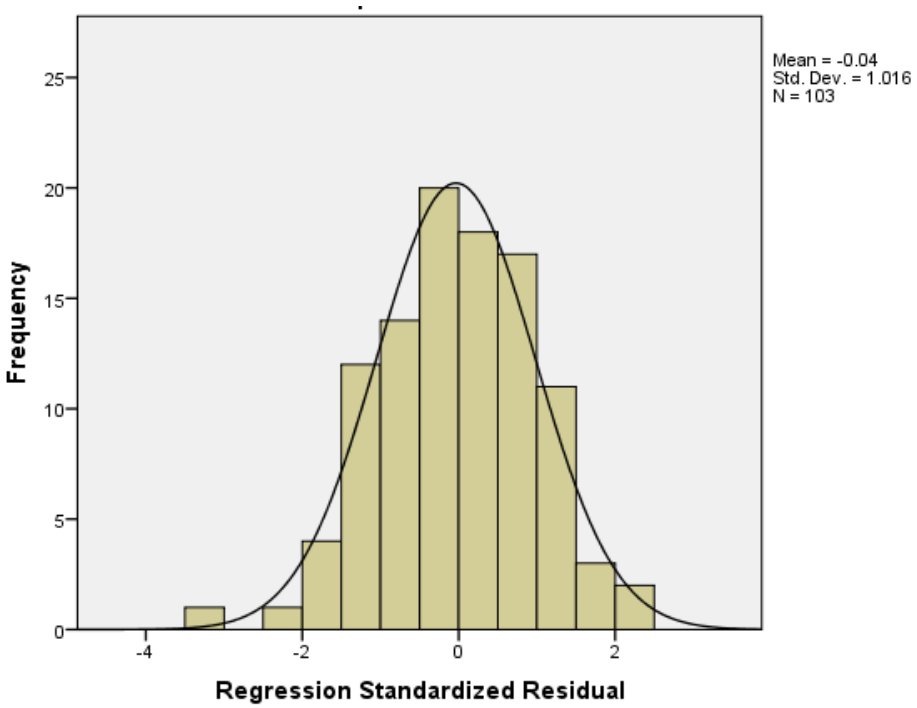


Figure 4-8: Histogram for dependent variable (income)

In order to ascertain that the results do not have any outliers, the scatterplot is used. As defined by (Tabachnick & Fidell, 2007) as any case that displays a standardised residual of more than 3.3 or less than -3.3 is an outlier. The table below shows the results from the dependent variable income. There are no outliers in the sampled data as all of it fall within the accepted range.

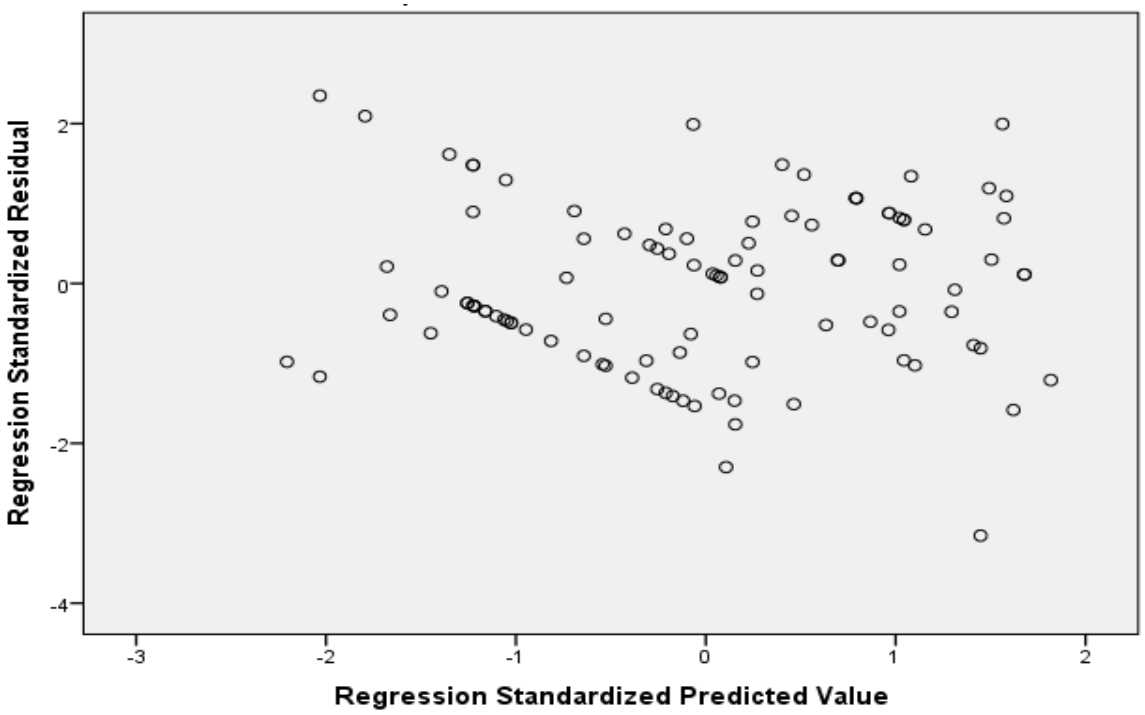


Figure 4-9: Scatterplot for dependent variable (Income)

Most of the meaning of the different test performed have been clearly explained in the first relationship test. On presenting the result of the remainder of the test, the information will be summarised without going into detail as this has been covered above.

4.12 Testing the relationship between financial application awareness, knowledge and use of financial applications against ability to expand and create employment

As part of the researcher's endevour to establish whether there is a relationship between entrepreneurs who are aware of financial applications and have knowledge and use them and are able to expand their business and create employement. The results from sampled data below are analysed.

The model summary below shows R square of .505. This means that 50.5% of the independent variables explain any changes to entrepreneurial success as far as expansion and employment creation is concerned. This relationship is hugely significant, in other words it certifies that financial application awareness and knowledge and use of them accounts to 50.5% of entrepreneurial success.

Table 4-9: Model Summary: Testing independent variables against expansion and employment creation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.710[a]	.505	.495	3.64552	.505	50.454	2	99	.000

a. Predictors: (Constant), FinUse, FinAware

b. Dependent Variable: Employ

To further test this relationship between these variables, ANOVA was used. This helped to determine if there is a significant deference on the dependant variable by independent variable. The results as shown on the table below conclude that there is a relationship between the dependant variable of ability to expand and creation of employment with the independent variable of financial awareness, knowledge and use. This therefore rejects the null hypothesis which says there is no relationship between the variables with a p-value less than .0005.

In order to determine the fitness of the model the F-ratio under the ANOVA was also recorded at 50.5% which gives credit to the instrument used as opposed the general mean.

Table 4-10: Testing the variability between independent variables and expansion and employment creation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1341.050	2	670.525	50.454	.000[b]
	Residual	1315.690	99	13.290		
	Total	2656.740	101			

a. Dependent Variable: Employ

b. Predictors: (Constant), FinUse, FinAware

4.13 Evaluating the independent variables

In order to further determine the strength of the relationship between the dependant variable (expansion and employment creation) and the independent variables (financial

application awareness and Knowledge and usage) the standardised coefficient was analysed and the results below table 4.11 conclude that financial applications awareness has a positive contribution of 41.8% toward the entrepreneur's ability to expand and create employment. The same conclusion on the relationship was reached when comparing the knowledge and use of financial application and the ability to expand and create employment with a percentage representation of 36.4%.

Table 4-11: Standardised coefficient analysis for expansion and creation of employment

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.965	1.275		3.895	.000
	FinAware	.192	.043	.418	4.503	.000
	FinUse	.320	.082	.364	3.923	.000

Dependent variable: expansion and employment creation

Several regression tests were applied, such as the normality test to check if the data falls within a reasonable distance within a diagonal straight line proving that there is no major deviation normality in the results obtained. The figure below shows the outcome.

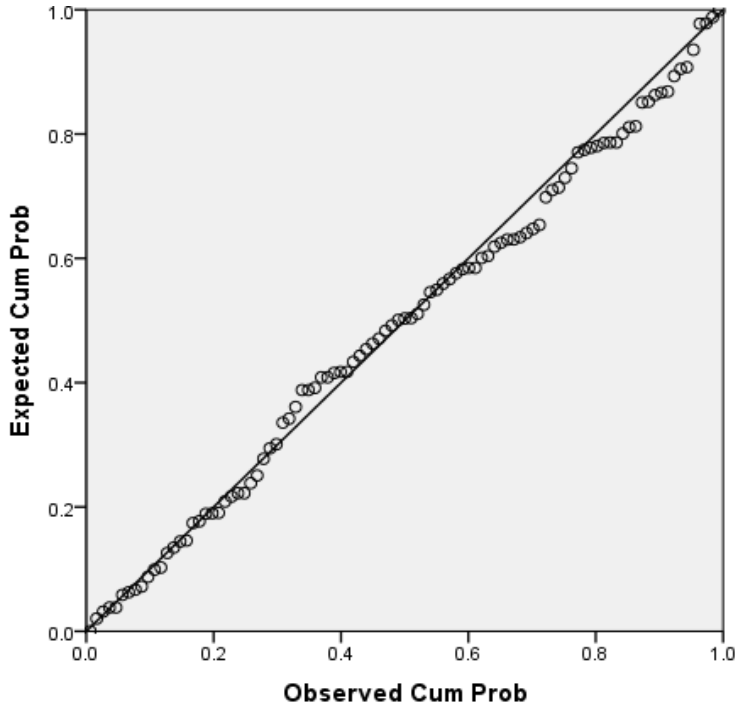


Figure 4-10: Normal P-P plot for the dependent variable (expansion and employment creation)

The histogram below is also used to depict the normal distribution of the residuals.

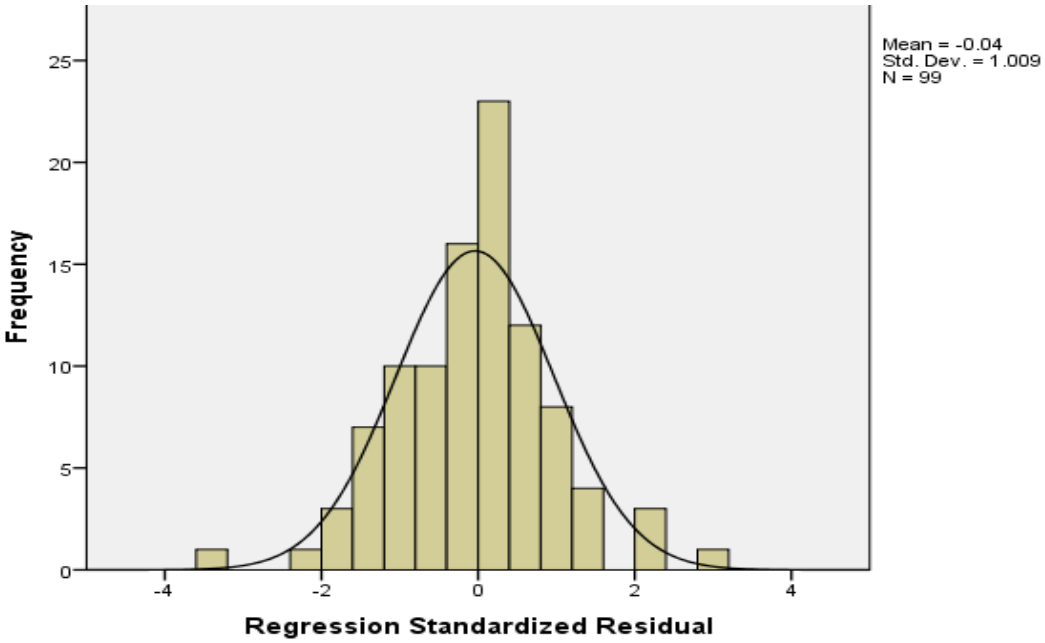


Figure 4-11: Histogram for dependent variable (expansion and employment creation)

As a means of confirming that there are no outliers, the scatterplot as shown in the table below is used. The result shows that all the sampled data falls within the acceptable range of between -3 and 3.

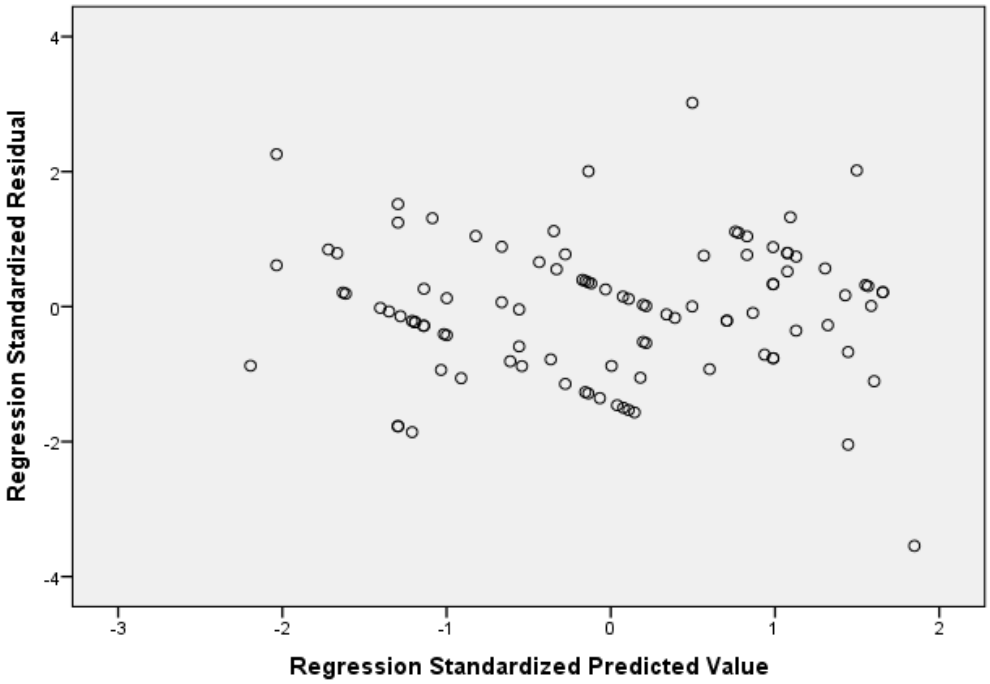


Figure 4-12: Scatterplot for dependent variable (expansion and employment creation)

4.14 Testing the relationship between financial application awareness, knowledge and use of financial applications against ability to survive during economic meltdown.

This is the last of the three dependent variables that was subjected to a test. The model summary below shows how much of the variance in the dependable can be explained by the independent variable. The results below indicate that the independent variable can be attributed to explain 52.9% of the entrepreneur's business ability to survive during economic meltdown. This is a huge contribution by any means. It therefore confirms that there is a strong relationship between the dependent variable and the independent variables.

From the table below we used the R squared instead of the adjusted R square as our sample size was big enough to report on.

Table 4-12: Model Summary: Testing independent variables against ability to survive during economic meltdown (dependent)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.727[a]	.529	.520	3.61012	.529	58.337	2	104	.000

a. Predictors: (Constant), FinUse, FinAware

b. Dependent Variable: Survive

In order also to further test this relationship, the AVONA was applied on the sampled data. The result bellows show that the alternative hypothesis is true; with a level of significance of less than .0005 it confirms that there is a relationship between survival and the use of financial applications. The F-ratio standing at 58.34% also confirming the fitness of the model.

Table 4-13: Testing the variability between independent variables survival using ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1520.610	2	760.305	58.337	.000[b]
	Residual	1355.427	104	13.033		
	Total	2876.038	106			

a. Dependent Variable: Survive

b. Predictors: (Constant), FinUse, FinAware

4.15 Evaluating the independent variables against the dependent variable

The strength of this relationship is also tested by using the standardised coefficient analysis. The information presented below testifies that from the research conducted financial applications awareness contribute 53.8% to the success of the business in its ability to survive during economic meltdowns. In other words, the relationship established here is strongly positive. The more the entrepreneur increases his awareness as far as financial applications are concerned the more he learns how to survive during economic meltdown. The same applies for the knowledge and use the contribution knowledge has on the ability of an entrepreneur surviving economic hard

times is 25.2% which is also a huge contribution in business terms. The more the knowledge and usage increases the more the entrepreneur's ability to withstand economic hard times is strengthened.

Table 4-14: Standardised coefficient analysis for survival

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.227	1.232		4.242	.000
	FinAware	.251	.041	.538	6.086	.000
	FinUse	.225	.079	.252	2.855	.005

Dependent variable: survival

To further confirm the position form the results, it was also paramount to conduct further examinations such as testing the normality of the data and the distribution of the data. The Normality table below shows that there is no major deviation from the expected as far as our sampled data is concerned. The P-P table 4.13 below shows that all the plots fall almost along the straight diagonal line. This is a good indication of normality.

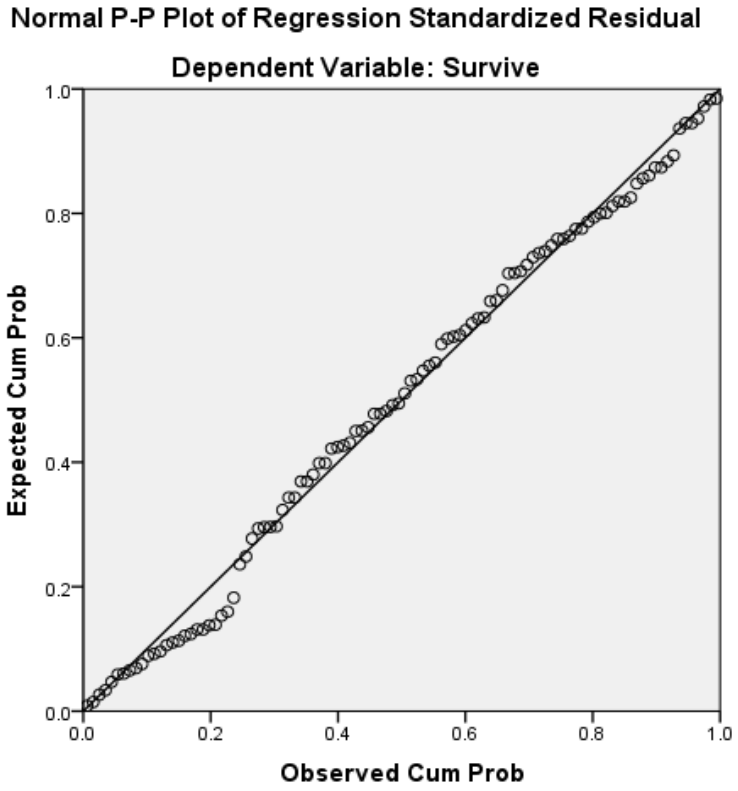


Figure 4-13: Normal P-P plot for the dependent variable (survival)

To observe how the residuals are distributed the histogram below give a good picture of that distribution.

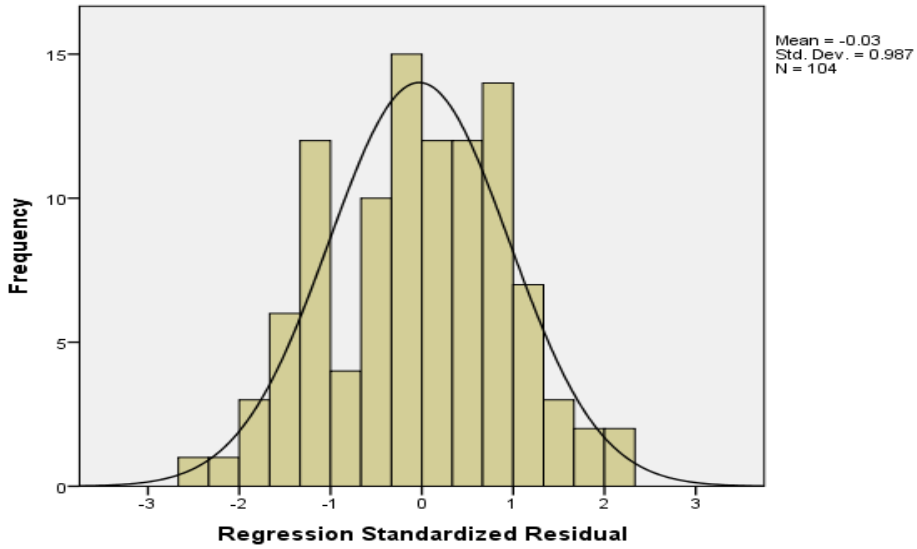


Figure 4-14: Histogram for dependent variable (survival)

As a way of verifying that there were no outliers, a scatterplot was presented as indicated below and it does confirm that the sampled data fall within the expected range of -3 to 3. The table below confirms this.

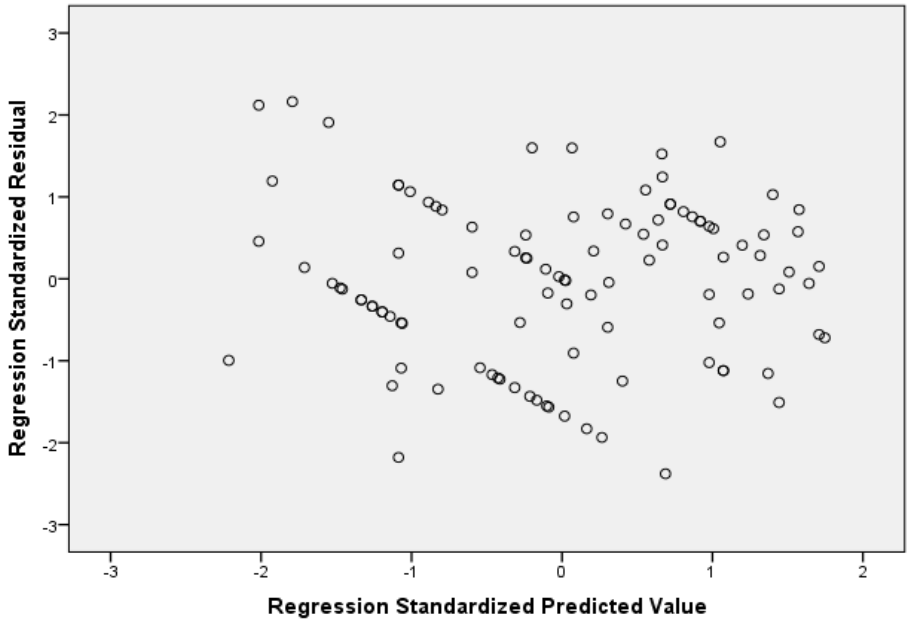


Figure 4-15: Scatterplot for dependent variable (expansion and employment creation)

Having analysed the above statistics it can be confirmed from the research conducted that there is a positive relationship between the independent variables and all the dependent variables. Therefore the model shown above in figure 4.15 can be confirmed to be true.

4.16 Testing the relationship between general support from stakeholders against all the dependent variables

This research will not be complete if we do not present through the regression analysis the impact and effects of the moderating variable (general support from stakeholders) on the dependent variables. The table below will group all the model summary results for all the variables.

Table 4-15: Model Summary: Testing independent variable (Support) against dependent variables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.333[a]	.111	.102	4.73077	.111	12.611	1	101	.001
2	.392[a]	.153	.145	4.74357	.153	17.394	1	96	.000
3	.373[a]	.139	.130	4.85763	.139	16.434	1	102	.000

a. Predictors: (Constant), Support

1. **Dependent Variable: Income**
2. **Dependent Variable: Employment**
3. **Dependent Variable: Survival**

The model summary table above shows that there is a positive relationship between the moderating variable and the dependent variable. With an average of 13% on the dependent variables its shows that general support from stakeholders contribute to the entrepreneurial business success to the magnitude of 13%. This is a huge contribution. The 13% support given by the stakeholders as far as the ability to generate income, ability to expand and create employment and ability to survive economic meltdown is concerned indicate the entrepreneurial success that can be explained by that relationship

The other results under this category are shown on the addendum.

4.17 Testing the relationship between general support from stakeholders against all the independent variables

It was also important to test if there is any relationship between support from the stakeholders and the two independent variables (financial applications awareness and knowledge and use of financial applications. The model summary table below shows how much the independent variables can be explained by the dependent variable.

Table 4-16: Testing the relationship between general support from stakeholders against all the independent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.210[a]	.044	.034	10.95051	.044	4.554	1	99	.035
2	.327	.107	.099	5.54710	.107	12.583	1	105	.001

a. Predictors: (Constant), Support

b. independent Variable: FinAware
c. independent Variable: FinUse

The general support explains around 4% of the financial applications awareness and about 10.7% of the knowledge and usage. The second is a significant contribution.

4.18 Testing the relationship between demographics against all other in the study variables

Overly on the result from the research it was taken into account that some important facts about the demographics are not to be overlooked. The independent sample-t was used in order to compare the mean scores of the different groups of the sampled population (Field, 2009). The table below shows the means and standard deviation for each group against the different variables. The results for income under gender show the mean almost at par with for both male and female 17.45 and 16.43 respectively. From the data sampled the mean for gender against income shows that there are no significance differences between genders. Also in assessing the difference between groups the Leven's test for equality of variances was used as indicated in table 4.17 below. Using the sig. (2-tailed) which appears under the t- test for equality of means the conclusion is that there is no significant difference between the two groups under income. In actual fact there is no significant difference across all variable under examination as far as gender is concerned.

Table 4-17: The demographics mean and standard deviation against all variables

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Income	1	70	17.4571	4.80545	.57436
	2	46	17.4348	5.31937	.78430
FinAware	1	71	34.9859	11.71018	1.38974
	2	52	36.9808	10.31939	1.43104
FinUse	1	78	16.4103	5.73084	.64889
	2	52	17.0385	6.04221	.83790
Employ	1	62	17.2903	4.77489	.60641
	2	45	17.0444	5.63252	.83965
Survive	1	64	18.0313	4.92151	.61519
	2	50	17.9200	5.60554	.79274
Support	1	65	14.6308	5.30792	.65837
	2	48	15.8542	5.65305	.81595

1. Male

i. Female

Table 4-18: T-test: Levene's test for equality of variances

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Income	Equal variances assumed	2.730	.101	.023	114	.981	.02236	.95178	-1.86311	1.90783
	Equal variances not assumed			.023	89.434	.982	.02236	.97212	-1.90909	1.95381
FinAware	Equal variances assumed	.880	.350	-.981	121	.329	-1.99485	2.03427	-6.02222	2.03252
	Equal variances not assumed			-1.000	116.842	.319	-1.99485	1.99481	-5.94553	1.95582
FinUse	Equal variances assumed	.168	.682	-.599	128	.550	-.62821	1.04855	-2.70294	1.44653
	Equal variances not assumed			-.593	105.405	.555	-.62821	1.05978	-2.72947	1.47305
Employ	Equal variances assumed	2.014	.159	.244	105	.808	.24588	1.00888	-1.75454	2.24630
	Equal variances not assumed			.237	85.160	.813	.24588	1.03573	-1.81338	2.30513
Survive	Equal variances assumed	1.820	.180	.113	112	.911	.11125	.98748	-1.84531	2.06781
	Equal variances not assumed			.111	98.113	.912	.11125	1.00344	-1.88002	2.10252
Support	Equal variances assumed	.071	.791	-1.178	111	.241	-1.22340	1.03847	-3.28119	.83440
	Equal variances not assumed			-1.167	97.706	.246	-1.22340	1.04844	-3.30406	.85727

4.19 Discussion

The primary objective of this study was to establish the relationship between financial applications and entrepreneurial success. In order to accomplish this objective a questionnaire was developed and used to collect data from identified entrepreneurs across South Africa. The data was put analysis process to test for various statistical approvals such as the validity, reliability correlations between constructs, regressions as well as the t –test for demographic differences.

The other secondary objective was to establish whether financial applications are used at all by entrepreneurs and also observed if entrepreneurs are trained and supported by stakeholder in the awareness and use of financial applications in order to achieve entrepreneurial success.

To maintain a clear picture, it is important to refer to the initial model that this research was seeking to establish. As shown below we can safely conclude that this model holds true the relationship that exists between financial applications, knowledge and use of financial applications and entrepreneurial success.

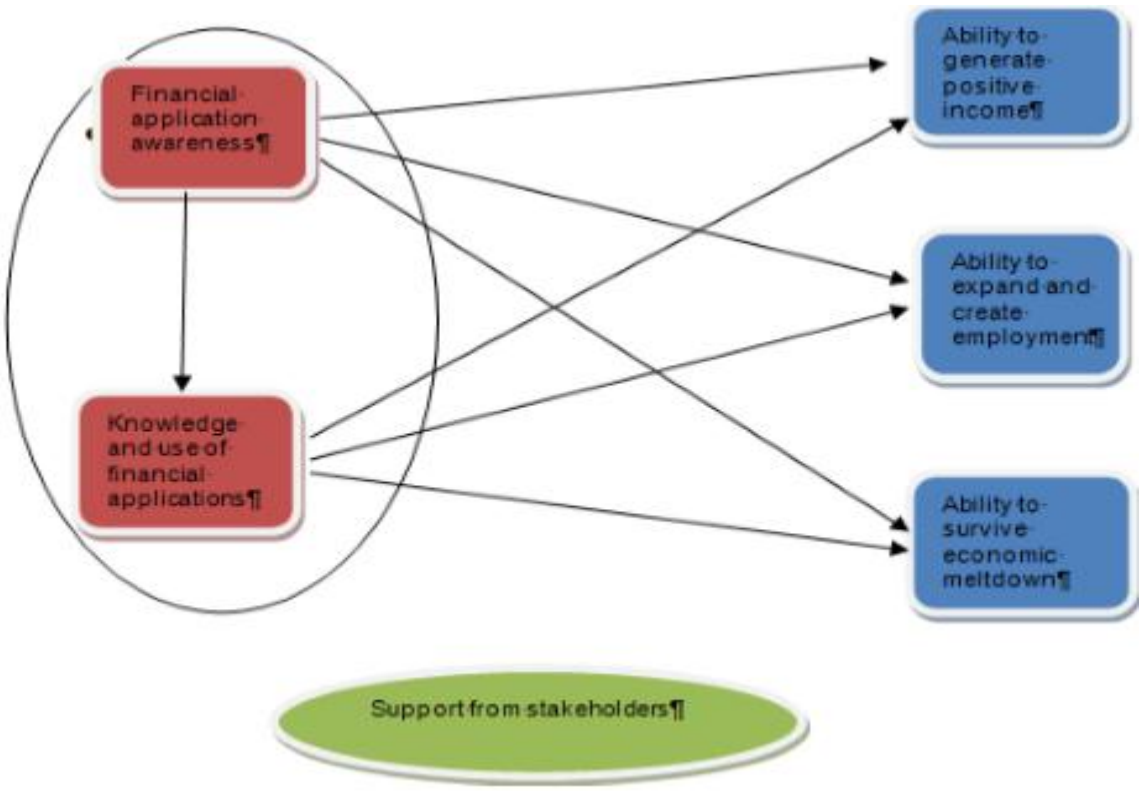


Figure 4-16: Model to describe the relationship between financial applications and entrepreneurial success

Beginning with the results of gender, previous studies indicate that males are still dominating the entrepreneurial business environment. According to the GEM report of 2012, the level of participation for woman entrepreneurs for South Africa stood at 6% (Kelley *et al.*, 2012). However the population that was sampled shows that females are not far off with 40.4% as compared to 2012 statistics. If this results from this study is anything to go by, we can conclude that there has been a massive improvement in the involvement of woman in entrepreneurship. This is an important development as it breaks the old myths and promotes gender equality. Further research might be needed in future to evaluate if the trend have changed.

As already mentioned in the literature study, entrepreneurial success is defined by achieving the following tenants:

- The ability to make positive income
- The ability to expand the business
- The ability to create employment
- The ability to survive during economic meltdown

The above mentioned was used as a measuring stick for entrepreneurial success. The results analysed in the better part of chapter four, confirm that there is a strong relationship between the use of financial applications and the performance of the business.

4.19.1 Discussing the relationship between financial applications and the ability to generate positive income.

The results obtained from the study indicate that there is a strong relationship between financial applications and the business's ability to generate positive income. As already stated in the literature study in chapter 2, many scholars like (Van Praag, 2005) support the notion that financial applications education is a major determinant of the success of an entrepreneur. Since making positive income is every entrepreneur's mission of the business, the results showed that it is important to educate entrepreneurs on the use of these financial applications in order to achieve positive income. The research result overwhelmingly shows that if the entrepreneurs could be given financial applications awareness training, the income levels will increase by a magnitude of about 47.3%. It also showed that 33.6% of income can be earned if the entrepreneurs can be given

knowledge on the use of financial applications. In monetary terms these contribution are huge for the success of any business.

4.19.2 Discussing the relationship between financial applications and the ability to survive during economic meltdown.

It is unquestionable that financial application plays an important role in the business ability to survive during turbulent times. The use of financial applications gives the business leverage in terms of:

- its ability to predict future trends,
- its ability to set aside enough capital reserves,
- its ability to diversify its investments
- its ability to provide real time financial reports for quick business decisions.

The results obtained as shown in the model summary above indicate that 52% of the entrepreneurial business survival can be directly explained by the use of financial applications. This aligns with already established literature such as (Groves *et al.*, 2011) that entrepreneurs need to have well planned financial applications in order to deal with the ever changing financial environment. Using the standardised coefficient 53.8% of the business chance to survive economic meltdown can be directly linked to the awareness that entrepreneurs have on financial applications, whereas 25.2% of the ability to survive turbulent times can be accredited to the knowledge and use of these financial applications.

4.19.3 Discussing the relationship between financial applications and the ability to expand and create employment.

The literature study as given by (Xavier *et al.*, 2012) shows the unemployment rate for South Africa is 48%, this is a huge rate by any standard. One of the agents of change towards this phenomenon is entrepreneurship. Therefore it implies that an entrepreneur's success in modern times can be assessed by his or her ability to expand the business and create employment. The research tested the relationship that the financial applications have on expansion and creation of employment by an entrepreneur. The results indicated that there is a strong relationship as 50.5% (R square) of the variance is credited of explaining the relationship between the financial

applications and expansion and employment creation. To add on to this, 41.8% standard coefficient for financial applications awareness determines the entrepreneur's ability to expand and create employment. This means to say that if financial applications awareness is made of paramount importance the entrepreneur will increase the ability to expand and create employment by a level of 41.8%. This is an indication of a strong positive relationship of the variables. The same applies for the knowledge and use of financial applications; the results show that 36.4% of contributions are made towards expansion and employment creation when financial applications are taught to entrepreneurs.

4.19.4 Limitations of the study

Though the results obtained in the research showed a consistence between literature and the research carried out, the level of participations was not very convincing especially electronically. Due to the fact that this was an exploratory study the results cannot be extrapolated to singular individuals. The Scope of the study was focused on individuals who run entrepreneurial ventures within South Africa.

The criterion for defining entrepreneurial success was limited to these four aspects:

- The ability to make positive income
- The ability to expand the business
- The ability to create employment
- The ability to survive during economic meltdown

Whereas there are other aspects that entrepreneurs value to be a measure of success apart from the ones mentioned above this made it difficult for them to respond accordingly.

4.19.5 Opportunity for further research

The study focused on the relationship between financial applications and entrepreneurial success. From the results gathered from the study it is clear that further research can be done in regard to the following:

- Relationship between ethnicity and entrepreneurial success.
- Challenges faced gender in achieving entrepreneurial success.

- The role of internet in enhancing entrepreneurial success

4.20 Chapter Summary

The research results were reported and statistically analysed using the statistical Programme for social Sciences (SPSS). The sampled demographic data was consolidated and presented.

The factor analysis was carried out to test for validity and reliability using the Kaiser-Meyer-Olkin (KMO) and the Cronbach's alpha coefficient respectively. Only one factor was extracted across the variables.

The t- Test was also applied on the demographic data in order to determine if there is any significant difference in the manner in which the entrepreneurs responded. The details are also presented in the appendix.

The correlations were performed across variables and can be summarised as follows:

- **Financial applications awareness, Knowledge and use of financial applications and ability to generate positive income.** The results indicated that there is a strong positive relationship between these. For every initiative taken by an entrepreneur to learn about financial application and to use financial applications there is a positive response in the performance of the business.
- **Financial applications awareness, Knowledge and use of financial applications and ability to expand and create employment**. The results obtained showed a strong positive relationship between these variables. This means that an entrepreneur who is aware and has knowledge of how to use financial applications is better placed to expand their business and create employment for other people.
- **Financial applications awareness, Knowledge and use of financial applications and ability to survive during economic meltdown.** Survival in business is one of the entrepreneurial challenges as echoed by (Herrington *et al.*, 2014). The results from the research indicate that you cannot separate financial applications in these modern times from the entrepreneur's ability to survive economic hardship. This implies that an entrepreneur should have knowledge of

how to sue even the basic excel financial application to forecast and predict future trends. The relationship between these variables is positive and strong.

Something to note as well is the contribution from the moderating variable which is support from general stakeholder. The results obtained showed that entrepreneurial success can be positively enhanced by the involvement of stakeholders such as the banks, other funding institutions and government in training these entrepreneurs. This will go a long way to contribute towards entrepreneurial success.

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusion of the study pertaining the primary objective of establishing the relationship that exists between financial applications and entrepreneurial success in identified companies.

Chapter one of this research outlined the process of the study that was followed to bring out the problem and identifying the objectives. A review of literature was presented in chapter 2 exploring the already established knowledge on the subject. Chapter 3 presented the methodology of how the research was to be carried out. A measuring instrument in the form of a questionnaire was developed and used to collect data. An exploratory study was conducted in order to bring light to the subject matter which was proposed in the questionnaire. Chapter 4 focused on the results derived from the study together with the analysis limitations and discussion of these results. It is in this chapter, (chapter 5) that the conclusion and recommendations are given.

5.2 Conclusions

5.2.1 The relationship between financial applications and entrepreneurial success

As already indicated from different studies, the relationship between the use of financial applications and entrepreneurial success is not debatable. The GEM report of 2012 by Herrington *et al.*, (2014) shows that many entrepreneurs in South Africa who do not have financial skills or use the financial applications do not survive in business. This consideration substantiates the results that this study produced. The results showed the need for entrepreneurs to be educated in the area of financial applications so that they may be able to grow their business.

The research findings concluded that a number of South African entrepreneurs are not using these financial applications due to lack of awareness as well as lack of knowledge on how to use them. The slow respond on the internet based questionnaire also bear witness to the slackness of using the computer, under which all the current financial applications are housed. Yet according to Bruyat & Julien, (2000) the fundamental goal of any growing economy is to develop entrepreneurial support in all spheres.

Some of the challenges that entrepreneurs encounter that makes them failure to success are:

- Lack of proper financial training
- Failure to access funding
- Lack of government support

The few above mentioned are directly related to the finding that we have established from the research study. The research finding support the notion that entrepreneurs cannot succeed in their business endeavour unless they have mastered the knowledge and use of financial applications such as capital budgeting tools, cash flow analysis, risk analysis tools, just to mention a few.

It can be therefore concluded that this research was able to expose a gap that most entrepreneurs and the funding organizations have not thoroughly considered. The trend and the norm is to avail funding mainly for political expedience without putting in place the necessary foundation to sustain these entrepreneurs.

The other conclusion that was reached in this study is the critical role that is played by both the government and the financial institutions as stakeholders. The result concluded that if stakeholders do not support entrepreneurs through capacity building training, backstopping support and constant follow up the entrepreneurs' failure rate is around 15% which is very significant by any standard.

As highlighted by Millán *et al.*, (2014) the key components that define entrepreneurial success were put to test through the questionnaire which are the ability of the entrepreneur to make positive income, the ability of an entrepreneur to survive during economic meltdown and also the ability of an entrepreneur to expand and create employment. The ones tested proved that their attainment is directly hinged to the financial applications awareness, knowledge and usage.

5.2.2 Ethnicity, financial applications and entrepreneurial success

The previous studies carried out by the Global entrepreneurship monitor South Africa, indicated that from period 2005 to 2014 opportunity driven entrepreneurship amongst black population moved from 22.9% to 59.8%. This could also be due to the BBBEE factor (Herrington *et al.*, 2014). However as far as the use of financial application the

black population is very low compared to the white counterparts who have a very low opportunity driven entrepreneurial initiations, standing 19.3% in 2005 and going down to 4.7% in 2014 (Herrington *et al.*, 2014).

5.3 Recommendations

Since we have established the important of the relationship between financial applications and entrepreneurial success, and the results of the survey showed that most entrepreneurs are not aware that they have knowledge on how to use financial applications. It is therefore recommended that:

- The government provide entrepreneurs with financial training.
- The banks also can play a role of monitoring entrepreneurs and offering them backstopping support. Especially those who are have good and bankable projects.

Due to the fact that entrepreneurship is now the bedrock of economic development in any society it is of great importance to synergise it with financial applications training. As indicated in chapter one under the managerial impact to the research, the stakeholders need to invest in equipping the entrepreneurs as this will yield positive results as far as the following is concerned:

- Raising capital for start-up.
- Plan new project and initiatives based on past success.
- Assess growth at every stage.
- Make critical business decision including decision on ploughing back profit.
- Reduce unnecessary cost, streamline operation and manage budgets.

REFERENCES

Acs, Z.J., Desai, S. & Klapper, L.F. 2008. What does "entrepreneurship" data really show? *Small Business Economics*, 31(3):261 - 281.

Aquino, N.P. 2005. Entrepreneurship Is Main Driver of Growth. *Business World*, 29(1).

Audretsch, D.B., Max, C.K. & Erik, E.L. 2006. Entrepreneurship and Economic Growth. New York: Oxford University Press.

Bhasin, B.B. & Venkataramany, S. 2010. "Globalization of Entrepreneurship: Policy Consideration for SME Development in Indonesia". *The International Business and Economic Research Journal*, 9(4):95 - 103.

Black, K. 2010. Business statistic. Hoboken, NJ: Wiley.

Bloomberg, B., Cooper, D. & Schindler, P. 2008. Business research methods. 2nd: european.

Brealey, R.A., Myers, S.C. & Allen, F. 2009. Principles of corporate finance. New York, NY: McGraw-Hill.

Bruyat, C. & Julien, P. 2000. Defining the field of Research in Entrepreneurship. *Journal of Business Venturing*, 16(2000):165 - 180.

Burns, N. & Grove, S. 2009. The concepts of measurement. The practice of nursing research: Appraisal, synthesis, and generation of evidence, 371-394.

Ciavarella, M.A., Buchholtz, A.K., Riordan, C.M., Gatewood, R.D. & Stokes, G.S. 2004. The big five and venture survival: Is there a linkage? *Journal of Business Venturing*, 19(4):465 -483.

Dabir, N. & Nigudkar, M. 2007. Child abuse: Confronting reality. Economic and political weekly.2863-2866.

De Vos, A., Delport, C., Fouch, C.B. & Strydom, H. 2012. Research at grass roots: A primer for the social science and human professions: Van Schaik Publishers.

DeVellis, R.F. 2003. *Scale development: Theory and application*. 2nd edn. Thousand Oaks, Califonia: Sage.

Field, A.P. 2009. Discovering statistics using SPSS. 2nd edition. London: Sage.

Fiet, J.O. 2002. The Systematic Search for Entrepreneurial Discoveries. Westport, CT: Quorum.

Firer, C., Ross, S.A., Westerfield, R.W. & Jordan, B.D. 2008. Fundamentals of corporate finance. 4th South African edition. London, England: McGraw-Hill.

Floyd, D. & McManus, J. 2005. The Role of Smes in Improving the Competitive Position of the European Union. *European Business Review*, 17(2):144-150.

Fowler Jr, F.J. 2002. Designing questions to be good measures. . *In survey research methods*, 3:76 - 103.

Ghauri, P.N. & Gronhaug, K. 2005. Research methods in business studies. Harlow, England: Pearson Education.

Gitman, L.J. 1997. Financial Management Principles 7th ed. São Paulo: Harbra. p. 605-608).

Gitman, L.J. & Zutter, C.J. 2012. Principles of managerial finance. 13th. Essex: Pearson.

Graham, P., Rob, B., Steve, E. & Peter, H. 2003. Business Finance. 8th: Irwin/McGraw-Hill.

Greenwood, J. & Jovanovic, B. 1990. Financial development, growth, and the distribution of income. *Journal of Political Economy XCVIII*:257 - 268.

Groves, K., Vance, C. & Choi, D. 2011. Examining Entrepreneurial Cognition:An Occupational Analysis of Balanced Linear and Nonlinear Thinking and Entrepreneurship Success. *journal of Small Business Management*, 49(3):438 - 466.

Hall, J.L. 2007. Accounting information systems. 5th Edition. Upper Saddle River, NJ: South-Western Thomson.

Herrington, M., Kew, J. & Kew, P. 2014. Global Entrepreneurship Monitor: South Africa Report. South Africa.

Huysamen, G. 1993. Metodologie vir die sosiale en gedragswetenskappe: International Thomson Publishing (Southern Africa).

Judge, T.A., Higgins, C.A., Thoresen, C.J. & Barrick, M.R. 1999. The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3):621 - 652.

Kelley, D.J., Brush, C.G., Greene, P.G. & Litovsky, Y. 2012. GEM 2012 Womans Report. Global Entrepreneurialship Research Association.

Kim, P.H., Aldrich, H.E. & Keister, L.A. 2006. The Impact of financial, Human, and Cultural Capital on Entrepreneurial Entry in the United states. *Small Business Economics*, 27(1):5 - 22.

Leedy, P.D. & Ormond, J.E. 2005. Practical research. Upper Sanddle River, NJ: Prentice Hall.

Lerner, J. 2010. The Future of public efforts to boost entrepreneurship and venture capital. *Small Business Economics*, 35(3):255 - 264.

Maani, K.E. & Majaraj, V. 2004. Links between systems thinking and complex decision making. *System Dynamics Review*, 20(1):21 - 48.

Megginson, W.L., Smart, S.B. & Graham, J.R. 2010. Financial Management. 3rd. Mason, Ohio: South-Western Cengage.

Millán, J.M., Congregado, E., Román, C., van Praag, M. & van Stel, A. 2014. The value of an educated population for an individual's entrepreneurship success. *Journal of Business Venturing*, 29(5):612-632.

Mohsen, T. & Reg, D. 2011. Making sense of Cronbach's alpha. *International Journal of Medical education*, 2:53-55.

Myers, J.C. 1997. Geostatistical error management. New York: Van Nostrand Reinhold.

Ned, K., Ravindra, K. & Balaji, R. 1997. Financial decision support with hybrid genetic and neural based modeling tools. *European Journal of Operational Research*(103).

Pallant, J. 2010. SPSS survival manual: A Step by step guide to data analysis using SPSS. 4th edition. Maidenhead: Open University Press.

Perks, S. & Smith, E.E. 2008. Focussed training programmes for solving growth problems of very small businesses. *Acta Commercii*(8):145-159.

Pike, R. 1996. A longitudinal survey on capital budgeting practices. *Journal of Business Finance and Accounting*(23):79 - 92.

Reeve, J.M., Warren, C.S. & Duvhac, J.E. 2012. Principles of financial & managerial accounting: using excel for success. International Edition. South-Western: Cengage Learning.

Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P. & Chin, N. 2005. Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998?2003. *Small Business Economics*, 24(3):205-231.

Rootman, C. & Krüger, J. 2012. Exploring the relevance of the financial management

module at a South African university. *Journal of Contemporary Management*, 9:402 - 420.

Ryan, B. 2007. Corporate finance and valuation. London, England: Thomson Learning.

Saunders, M.N., Saunders, M., Lewis, P. & Thornhill, A. 2011. Research methods for business students. 5/e: Pearson Education India.

Schall, L.D., Sundem, G.L. & Geijsbeek, W.R., Jr. 1978. Survey and analysis of capital budgeting methods. *Journal of Finance*, 33(1):281 - 288.

Schumpeter, J.A. 1934. The theory of economic development: an inquiry into profits, capital, credit, interest and the business cycle.: Transaction publishers.

Schwab, K. & Sala-i-Martín, X. 2014. World Economic Forum: The Global Competitiveness Report 2014–2015. http://www.weforum.org/reports/global-competitiveness-report-2014-2015.

Siggelkow, N. & Rivkin, J.W. 2005. Speed and Search: Designing Organizations for Turbulence and Complexity. *Organization Science*, 16(101).

Struwig, M., Struwig, F. & Stead, G. 2001. Planning, reporting and designing research. South Africa: Pearson.

Tabachnick, B.G. & Fidell, L.S. 2007. Using Multivariate statistics. 5th edn. Boston: Pearson Education.

Thurik, R. & Wennekers, S. 2004. "Entrepreneurship , small business and economic growth". *Journal of Small business and Enterprise Development*, 11(1):140 -149.

Van Praag, C.M. 2005. Successful Entrepreneurship Cheltenham, UK: Edward Elgar.

Vesper, K.H. 1990. New Venture Strategies. Englewood Cliffs, NJ: Prentice-Hall.

Wegner, T. 2007. Applied business statistics: *Methods and excel-based applications*. 2nd edn. Cape Town: Juta Legal and Academic Publishers.

Welman, Kruger & Mitchell. 2005. Research Methodology. Cape Town, South Africa: Oxford University Press.

Xavier, S.R., Kelley, D., Kew, J., Herrington, M. & Vorderwulbecke. 2012. Global entrepreneurship monitor: 2012 global report.

Zacharakis, A.L., Bygrave, W.D. & Shepherd, D.A. 2000. Global entrepreneurship monitor. National entrepreneurship assessment: . United states of America.

Zikmund, W.G. 2003. Business research methods. Mason, OH: Thomson/South-Western.

ANNEXURE A QUESTIONNAIRE

QUESTIONNAIRE

Research Questionnaire is to establish the relationship between the financial applications and entrepreneurial business success in South Africa's identified companies.

Dear participant

I am a MBA final year Student at the NWU School of Business and Governance. Thank you for sparing your precious time to complete this questionnaire. This questionnaire is being distributed to you purely for academic purpose with the intent to establish the relationship that exists between the use of financial applications and entrepreneurial business success.

You are not required to provide any financial figures or performance of your individual company. Please **DO NOT** write your company name or contact details anywhere on the questionnaire. Completed questionnaires will be kept confidential by the NWU for some time before they are destroyed. Your unbiased choices will be highly appreciated and makes a valuable contribution to this research. If you need any clarity please feel free to contact my supervisor Prof Ines Nel at Ines.Nel@nwu.ac.za or on 018 299 1405.

Thank you

Daniel Tongai Siro

MBA - Student

078 117 1317

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Please place a cross in the appropriate column. (X)

Section A – Demographics

1. Gender	
1. Male	
2. Female	

2. Age Group	
1. ≤ 25	
2. 26 – 35	
3. 36 – 45	
4. 46 – 55	
5. 56 – 65	
6. ≤ 66	

3. What is your nationality?	
1. South African	
2. Other	

4. Ethnicity	
1. Black	
2. White	
3. Coloured	
4. Other	

5. Highest level of Education	
1. Lower than grade 12	
2. Grade 12	
3. Post school diploma or certificate	
4. Under graduate degree	
5. Post graduate degree	

6. How many years have you been in Business?	
1. Less than 1	
2. 1 – 3	
3. 4 – 6	
4. 7 – 10	
5. >10	

7. How many employees does your business have?	
1. Less than 5	
2. 5 – 10	
3. 11 - 15	
4. ≥16	

8. Industry	
1. Farming	
2. Motor Mechanics	
3. IT and Telecommunication	
4. Retail and clothing	
5. Education and Health care	
6. Property, Safety and Security	
7. Transport	
8. Clothing	
9. Health Care	
10. Safety and Security	
11. Design and printing	
12. Construction	
13. Food and beverages	
14. Art and Crafts	

Section B – Financial applications Awareness

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	I am aware of financial applications and its contribution to business success	1	2	3	4	5
2	I have previously used financial applications for business management	1	2	3	4	5

Independent of your answers in 1 and 2 above please answer the question that follow						
3	Financial applications help me to understanding the concept of return on investment (ROI).	1	2	3	4	5
4	Financial applications help to improve capital expenditure decisions.	1	2	3	4	5
5	Financial applications help to identify risks in the business process	1	2	3	4	5
6	Financial applications improve cash flow analysis.	1	2	3	4	5
7	Forecasting is made easy by use of financial application	1	2	3	4	5
8	Financial applications improve business trends analysis	1	2	3	4	5
9	Financial applications makes business information readily available for future investments purposes	1	2	3	4	5
10	Companies are better prepared to do a comparison of the past and present by use of financial applications	1	2	3	4	5
11	Financial applications plays a key role in the company decision making about growth.	1	2	3	4	5

Section C – Knowledge and use of financial applications

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	I know how to use the capital asset pricing Model	1	2	3	4	5
2	I know how to apply the capital budget applications	1	2	3	4	5
3	I have knowledge of the different financial Accounting applications	1	2	3	4	5
4	I know how to use the cash flow management applications to make investment decisions	1	2	3	4	5
5	I have knowledge of valuation measurements that are used to determine growth.	1	2	3	4	5
6	We use effective risk analysis applications to determine future investments	1	2	3	4	5

Section D – Ability to generate positive income

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The company has been experiencing constant growth through the use of financial applications	1	2	3	4	5
2	The use of financial applications has resulted in improved return on investment.	1	2	3	4	5
3	The company has experienced increased cash inflows because better inventory management due to the use of financial applications	1	2	3	4	5
4	The use of financial applications has resulted in cost reduction by properly allocating cost	1	2	3	4	5
5	The company has experienced significant growth in sales by using financial applications as restocking is made easy	1	2	3	4	5
6	The company is able to pay all monthly obligations due to use of financial applications	1	2	3	4	5

Section E – Ability to expand and create employment

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Financial applications has given the company the ability to expand its operation.	1	2	3	4	5
2	The following departments have been expanded due to use of financial applications, IT Department	1	2	3	4	5
3	The finance department	1	2	3	4	5
4	We have a need for more marketing people in the company to cope with the expansion	1	2	3	4	5
5	The company financial performance has created interest from other big investors to put money in my company for expansion	1	2	3	4	5
6	The use of financial applications has helped create employment opportunities for many young people in South Africa	1	2	3	4	5

Section F – Ability to survive during economic meltdown

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The use of Financial applications to predict future trends has helped the company to survive economic meltdowns	1	2	3	4	5
2	The use of financial applications has enabled the company to set aside enough capital reserves to with stand any economic meltdown	1	2	3	4	5
3	The financial applications helps produce real time financial reports which are up to standard, there are no leakages	1	2	3	4	5
4	The use of financial applications has assisted the company to diversify its investments to avoid total collapse of the company	1	2	3	4	5
5	The year to year comparison of financial information has helped improve performance of the business over the years	1	2	3	4	5
6	The financial applications helps the company analyse business seasonal trends	1	2	3	4	5

Section G – General support from stakeholders

No	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The government has training opportunities for South African entrepreneurs in financial management	1	2	3	4	5
2	The government has training opportunities for entrepreneurs from foreign nations on financial management	1	2	3	4	5
3	The government offers backstopping support for struggling entrepreneurs on how to manage finances	1	2	3	4	5
4	There is a recommended easy to use financial application for entrepreneurs by funding authorities	1	2	3	4	5
5	The banks educate entrepreneurs on the need for financial applications as a requirement for funding opportunities.	1	2	3	4	5
6	Capacity building workshops are conducted to help entrepreneurs keep to date with modern financial management systems.					