A financial literacy programme for final year university students

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A social entrepreneurship project submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2017
DECLARATION

I, Roshan Vinayack Bhana, declare that this social entrepreneurship project is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Roshan Vinayack Bhana

Signed at Johannesburg

On the 8th day January 2018
DEDICATION

To my wife, Varsha without whom this would have never been possible.

To my daughter Shweta, who continues to inspire me to be the best possible example to you.

Thank you both for the support and encouragement on this incredible journey I have undertaken.
ACKNOWLEDGEMENTS

Dr Michael Shaw, thank you for the assistance, time, input and guidance during this project.

Varsha and Shweta for the many hours I spent away from you while completing this journey. In addition, the support, motivation, encouragement and assistance when I really felt like throwing in the towel and not completing my MBA.

Alexander Forbes Health (Pty) Ltd, my current employer for the support provided throughout my journey to complete my MBA.

The FinMark Trust, for making available to me the raw data collected through the FinScope Surveys which has been used to inform the research for this social entrepreneurship venture. The FinMark Trust is not liable for any analysis or interpretations of the data for the purposes of this research.

To the Financial Services Board, the FinMark Trust, the Alexander Forbes Research Institute and the Actuarial Society of South Africa for availing resources to contribute towards my research conducted.
SUPPLEMENTARY INFORMATION

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Supplementary files: Appendix 1 – Financial literacy scoring matrix
Appendix 2 – Financial Projections

† Including Executive Summary, References, and appendices.
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1. EXECUTIVE SUMMARY

1.1 Purpose of the Study

This social entrepreneurship venture proposal aims to address the low levels of Financial Literacy in South Africa, with a specific focus on university students in their final year of study. The venture would take the form of a financial literacy education programme.

1.2 Literature review

The conclusions drawn from the literature review are documented in Section 3.2.9. These can be summarised as follows:

- No formalised definition of financial literacy exists in South Africa.
- Individuals primarily obtain a level of financial literacy when they start using financial products as they enter the workforce, at which point it may be too late.
- Financial literacy is a huge problem in South Africa. The main solution to address this has been identified as introducing intervention measures as early as possible in one’s lifetime, possibly incorporating these interventions into the education curricula.
- The current programmes available are failing miserably.

1.3 Research Methodology

The research methodology applied is a mixed methodology to inform the financial literacy venture. A quantitative methodology is applied to the problem of financial literacy. This has been based on secondary data obtained from the FinMark Trust. A qualitative methodology has also been applied to the problem of the failings of existing financial literacy programmes, with information gathered through face to face interviews conducted with industry stakeholders.
1.4 Research Results

1.4.1 Quantitative Results

The quantitative research conducted based on secondary data obtained from the FinMark Trust as part of the FinScope surveys conducted has reinforced the findings of the FinScope surveys that financial literacy levels are poor (Roberts, Struwig, & Gordon, 2016), even for university students and university graduates. Note that the FinMark Trust is not liable for the analysis or interpretations of the data provided as part of the quantitative research conducted.

The results are summarised as follows:

- University students use financial products less extensively when compared to university graduates, although the level of knowledge of financial products do not differ extensively between the two groups.
- Attitudes between the two groups are not dissimilar, although graduates exhibited more positive attitudes.
- Behaviours between the two groups differed substantially.
- University graduate exhibit low relative levels of financial literacy, although these are in line with the levels of financial literacy reported in the FinMark Trust FinScope surveys.
- University students exhibited extremely low levels of financial literacy making them the ideal target for intervention measures, and hence for this venture which is proposed to take the form of a financial literacy programme.

1.4.2 Qualitative results

The common themes emerging from the qualitative study is summarised as follows:

- Most individuals are not aware of financial literacy programmes or where to access them, with a perception that they are costly to access. There is a proliferation of programmes focused on those in formal employment, yet
these programmes are disjointed with no co-ordination between them. It is education in general that is an issue rather than financial literacy in particular.

- Knowledge, attitudes and behaviours are a function of the economic climate, and due to other external factors such as household behaviours, lack of knowledge of the consequences of particular actions, individual circumstances, the current culture of consumption and instant gratification, and the conscious choice made by individuals irrespective of knowledge. A lack of role models exhibiting the correct attitudes and behaviours was also cited as a reason for poor attitudes and behaviours.

- Financial literacy programmes happen too late in an individual’s life cycle, and such interventions were typically static and once off initiatives offering no ongoing education and support. Programmes were also too generic not meeting the specific needs of the target audiences, specifically not considering generational aspects.

- Some reasons for the shortcomings of existing programmes include:
  - The lack of co-ordination of programmes, and hence lack of accurate measurement of outcomes of these programmes;
  - The lack of ongoing engagement, education and support;
  - Education only focusing on products that are available;
  - The grey area between education and marketing;
  - Lack of formal acknowledgement of competence;
  - Lack of authenticity of programmes; and
  - Incorrect personnel delivering such programmes.

- Policymakers could play a larger role in influencing financial literacy levels and financial outcomes, in particular providing instruction on the inclusion of financial literacy programmes in education curricula.

- South Africa’s unique situation in terms of socio economic, political and educational level exacerbates the problem of financial literacy when compared to other countries in the world, specifically developed countries.

- Programmes can be improved by the following mechanisms:
  - Introducing tangible incentives to change attitudes and behaviours;
  - Conducting of programmes in the mother tongue of individuals;
o Addressing the conflicts of interest that exist between product providers and those who provide financial literacy programmes. Often, these are one and the same;
o Contributing towards longitudinal studies to track outcomes and behaviours over time; and
o Embracing the advancement of digital technologies.

1.5 Business Plan for financial literacy programme for university students

The business plan is provided in the form of a business model canvas, augmented by a financial analysis for one university and a strategic analysis of the entire venture.

The conclusion from these analyses is that there is merit in implementing the venture, which has also been modelled to be financially viable. The potential exist to scale this venture to all universities in South Africa, as well as to other target segments of the population.

1.6 Recommendations for further research

The key recommendation for additional research pertains to longitudinal studies. Studies on financial literacy are quite recent, with most studies being conducted in the last decade. Thus, there exist extensive scope for conducting research in this area in the future.

2 INTRODUCTION

2.1 Purpose of the Study

This social entrepreneurship venture proposal aims to address the low levels of Financial Literacy in South Africa, with a specific focus on university students in
their final year of study. The venture would take the form of a financial literacy education programme.

2.2 Context of the Venture

The current venture has been chosen based on the current low levels of savings and the elevated levels of debt of the South African population, compounded by the substantial number of South Africans with an impaired credit records. In addition, the current low levels of financial wellbeing of the general population, and the long-term implications in terms of financial security, specifically once individuals exit the workforce through retirement, indicates that the current interventions to improve financial literacy in South Africa has not resulted in the desired outcomes for the population.

Empirical evidence indicates that only 9 in 100 individuals has built up sufficient savings to retire comfortably (Financial Services Board, 2017), with the remainder forced to continue working, or be dependent on other sources for support, such as family or the State. Furthermore, the current credit-active consumers total 24.25 million (National Credit Regulator, 2016), of which 9.85 million or just over 40% of these have impaired credit records.

The venture will take the form of a financial literacy education programme with the primary aim to address the poor financial outcomes, with the intention of having the programme endorsed by the Financial Planning Institute of South Africa (FPI), the Financial Services Board (FSB), the FinMark Trust, and other recognised institutions currently tasked with financial literacy and financial education in South Africa. The course will be taught through formal tertiary education providers, with those embarking on the course receiving formal certificates of competence and attendance. The intention is to make this course mandatory as part of the university curriculum.
2.3 The problems that will be addressed

2.3.1 Primary problem

The main problem the venture will address is to ensure that financial literacy programmes are targeted at the correct audience at the correct time in an individual’s life cycle.

Current initiatives are currently aimed at providing financial literacy to individuals who have been in the workforce for some time. For most individuals, the timing of this education is often too late. By the time these individuals have attained financial literacy, they have incurred huge costs through decisions that have resulted in costly financial outcomes, or have developed poor behavioural habits pertaining to their finances, which makes it extremely difficult to implement corrective measures. This is evident from empirical evidence which suggests that financial education does not seem to have the desired impact on financial planning and hence financial outcomes and financial wellbeing (Rafera, Dhaliwal, & Kaur, 2016).

2.3.2 Secondary problem

A secondary problem identified is that despite the numerous financial literacy programmes currently available, through the FSB at no cost to the consumer, or through initiatives from the firms operating in the financial services industry which may have commercial motives, the outcomes of these programmes have not had the desired impact on financial literacy levels when one considers the debt and savings levels of South Africans as discussed in the sections above.

2.4 Significance of the venture

Although significant research already exists on the current levels of financial literacy of the general South African population, including the segment specifically targeted for this venture, no intervention methods have proven successful to improve the current levels of financial literacy levels of the population, as alluded to from the
studies conducted by the statistics quoted above regarding the retirement outcomes, and the current level of indebtedness of South Africans. These problems identified above forms the basis of the venture.

The venture considers the research conducted by The Financial Services Board, The FinMark Trust, and the research conducted by other scholars to provide an alternative means of addressing the current levels of financial literacy using a different approach by means of a specific targeted financial literacy programme.

The formalised education programme in financial literacy will cover the basics of personal financial management including budgeting, tax, short term savings, both general and goals based, long term investments including for retirement, short term protection cover (car insurance, home owners insurance), long term protection cover (life insurance, dread diseases insurance), healthcare, short term debt management (credit card, store cards), long term debt management (student loans, car loans, home loans, credit rating), estate planning, and the role of the different stakeholders in the financial ecosystem.

Additional concepts and their contribution to the current levels of financial literacy, such as “black tax”, the apartheid legacy, the baby boomers and sandwich generations phenomena and behavioural economics may also be considered.

2.5 Scope and Limitations

Despite the literature indicating that financial literacy is a problem at all levels of society, the venture aims to improve the levels of financial literacy only for university students currently engaged in their final year of study. Limiting the venture to this specific target segment would ensure that the venture channels all its energy on a small specific target market, since success with this defined target market would indicate the scalability of the venture to other target markets.

The primary aim for targeting this segment of the population is that these students will soon enter the labour market, and would need to be equipped with the tools to start their careers with the correct financial habits.
The venture also does not aim to replace any current programmes available in practice, but rather aims to supplement and complement the initiatives of the financial services industry.

3 Literature Review

3.1 Introduction

This chapter provides a review of the current literature related to financial literacy in South Africa in general and of university students. The current programmes offered to address financial literacy in South Africa is also reviewed. Management theories and their application to the financial literacy social entrepreneurship venture are then considered.

The financial literacy component commences by first considering financial literacy discussing the various definitions of financial literacy and arriving at an appropriate definition for this venture. This would include the various forms of measuring financial literacy. A review of where and how individuals achieve financial literacy is considered. The motivations for why financial literacy is important is assessed, considering specifically the impact high financial literacy has on society. Financial literacy results of previous studies are discussed, after which proposed solutions, and shortcomings of current initiatives are then explored.

The gaps in the current literature this venture wishes to address regarding university students in South Africa are then discussed, considering the consumer impact of the venture. These elements cover the primary and secondary problems identified above.

Following the literature review on financial literacy, a framework of the social entrepreneurship venture is discussed illustrating the management theories selected and how these will be applied in practice to the venture.
3.2 Financial Literacy

3.2.1 Definition

Currently, there does not exist a standardised universally accepted definition of financial literacy. Various researchers have attempted to define financial literacy in specific terms, and this has contributed to the difficulty in standardising the definition.

The Oxford English dictionary defines literacy as competence or knowledge in a specific area (Oxford University Press, 2017), so financial literacy would thus imply competence or knowledge in the area of finance; one definition of finance is that of the management of money. Financial literacy is thus competence and knowledge in the management of money.

Different authors have expanded on this basic definition to include behavioural (Shambare & Rugimbana, 2012), attitudinal (Louw, Fouché, & Oberholzer, 2013), and practical actionable aspects, and to broaden the definition beyond competence and knowledge in just simply managing money, to include knowledge about products (Huston, 2010; Schwella & van Nieuwenhuyzen, 2014), where and how to procure such products (Huston; 2010. Schwella & van Nieuwenhuyzen, 2014), and where to seek assistance when required and being able to operate independently in the environment (Shambare & Rugimbana, 2012).

de Beer and Coetzee (2003) further indicate that it is a process of empowering and educating consumers such that they make better financial decisions having full appreciation of their rights and responsibilities as consumers of financial products and can understand and manage their risks.

Most definitions seem to be derived from the definition proposed by the Organisation for Economic Co-operation and Development (OECD), which states that financial literacy is a combination of several factors, which enables an individual to attain financial wellbeing through sound financial decisions, including Awareness, Skill, Knowledge, Attitude, Behaviour (OECD INFE, 2011).
The OECD (2005) further expands on this to state that this is process through which individuals improve their understanding of financial concepts and products and develop the skills and confidence to become aware of the risks and opportunities to make decisions, seek help and take other actions to improve their financial wellbeing.

The Financial Services Board (FSB) states financial literacy as a complex multi-dimensional concept that comprises a combination of awareness, knowledge, skills, attitude and behaviour, incorporating financial control, appropriate choice of products, financial planning and knowledge and understanding, the four domains informed by the OECD (Struwig, Roberts, & Gordon, 2013).

The financial literacy definition to be used for this venture will be that proposed by the FSB, to retain relevance to the South African context.

### 3.2.2 Measuring financial Literacy

Due to the different definitions of financial literacy, no standard measures for financial literacy currently exists. Most results for financial literacy are based on the score achieved from the completion of questionnaires typically covering questions on knowledge, awareness, skill, attitudes and current utilisation of financial products. The scores derived from such surveys are again subjective, and are usually compared to benchmark scores, where no basis for the benchmark is provided. This relative literacy of participants responding to the questionnaires are usually the method of measurement.

In conducting studies, most authors either relied on measurement scales developed by other authors, or had developed their own measurement scales, or simply provided qualitative results based using initial baseline studies as a point of reference.

The OECD INFE (2011) has provided a guideline for conducting such questionnaires, to determine a baseline financial literacy score, and this is used as an international benchmark. This again does not provide what the acceptable score
should be, but that future surveys could be compared to this initial baseline score. In South Africa, the FSB uses this score.

Despite there not being a standardised measurement metric for financial literacy, the outcome of such studies indicates very low levels of financial literacy in South Africa. This is discussed further in section 2.2.6 below.

### 3.2.3 Attainment of financial literacy

Financial literacy is not something that we are born with, and is an attribute that needs to be learned (Maistry, 2010). The learnings and the associated behaviours and attitudes are also developed from a very early age (Rootman & Antoni, 2015).

Currently, individuals obtain levels of financial literacy at various stages of their lives, from parents, formal primary, secondary and tertiary education or when they first start to derive an income either through entering formal employment or through entrepreneurial ventures (Shambare & Rugimbana, 2012).

Other sources of obtaining financial literacy include government initiatives through the FSB, workplace education programmes, print and social media, television, formal courses, financial services providers and using financial advisors.

This is dependent on the appetite of individuals to obtain an adequate level of financial literacy. (Rootman & Antoni, 2015) indicate that financial knowledge depends on whether individuals are willing to ask for financial advice, read financial sections of newspapers and learn about money management. Thus, this indicates that the attainment of financial literacy requires push factors to ensure individuals seek financial literacy.

### 3.2.4 Why financial literacy matters

The primary reason for improving financial literacy levels in South Africa is informed by the poor financial outcomes observed regarding individuals saving sufficient funds to retire comfortably (9%) (Financial Services Board, 2017), the high
percentage of South Africans with impaired credit records (40%) (National Credit Regulator, 2016).

In addition to poor outcomes, numerous studies have identified additional benefits to individuals, product providers and the economy, as well as welfare benefits of a highly financially literate populace.

Rootman and Antoni (2015) surmises that there is certainly a possible link between financial education, financial literacy, financial inclusion and ultimately financial behaviours of consumers. This implies that to achieve rich outcomes in terms of financial behaviour can only first be achieved through financial education to improve financial literacy to enable participation in the financial environment.

To an individual, being financially literate empowers them to know which questions to ask, deal with the complex environment, and know which channels to pursue when not satisfied with financial products (Rootman & Antoni, 2015). Individuals would also have increased levels of savings, retirement planning, in control of their debt, and knowledge preventing them from being duped (Rafera et al., 2016). Stedall and Venter (2016) positions further that financial literacy also ensures individuals choose the correct financial products. Individuals would also not be required to rely on chance or informal advice of friends and family when making financial decisions (van Deventer, de Klerk, & Bevan-Dye, 2014).

Another imperative for young people is that any financial mistake made early in life could be extremely costly. University students may carry large student debt, which may negatively impact their ability to achieve financial wellbeing (Fatoki & Oni, 2014).

The OECD also mentions financial tools, discipline, retirement outcomes, and surviving on any level of earnings, irrespective of how meagre as additional benefits to individuals who are financially literate (OECD, 2005).

The benefits of a financially literate populace for the financial services industry would be an increase in the demand for financial products, increased vacancies for financial advisors, and reduced levels of compliance regulation (de Beer & Coetzee,
2003). Financial service providers would also be able to increase market share and improve financial inclusion, ultimately reaching those classified as being at the bottom of the pyramid. High financial literacy may remove the barriers to financial inclusion (Rootman & Antoni, 2015).

Additional benefits punted by the OECD (2005) include products being designed to meet specific needs, encouraging competition and innovation of product providers, thus providing new products of improved quality, and better protection for the financially literate in that they can protect themselves report rogue providers and reduced need for regulation (OECD, 2005).

Benefits to society would be reduced levels of regulatory requirements and the reduced need for a regulatory authority, financially secure households contributing to higher levels of economic stability through higher levels of savings and investments, and having a financially inclusive economy (de Beer & Coetzee, 2003) and sustainable economic growth (Rafera et al., 2016). Studies also indicate that the welfare benefits would include a reduction in poverty, where positive correlation with financial literacy was established (Nanziri, 2016).

Additional systemic factors due to contributing to the increased need for improved financial literacy include:

- The high level of complexity of financial products available, and the large number of product providers, compounded by the number of individual areas individuals would be required to attend to (savings, debt, investment, insurance, estate planning, etc.). The cost of these products can also exacerbate poor outcomes stemming from low financial literacy.

- The increased life expectancy due to improved lifestyle behaviours, government intervention in terms of provision of basic service and the advances in medical technology (OECD, 2005). In South Africa, life expectancy increase from 55.2 years to 62.4 years from 2002 to 2016 (Stats SA, 2016).

- The increased responsibility placed on individuals regarding saving for retirement with the conversion of pensions from defined benefit to defined
conversion, and all risks being transferred to the individual (OECD, 2005). Learnings from past generations may also be significantly reduced especially for those from disadvantaged backgrounds, where financial literacy may be non-existent (de Beer & Coetzee, 2003).

- The current low levels of financial literacy, as discussed in Section 2.6.

### 3.2.5 Financial Literacy results

All the literature reviewed reached the same conclusion regarding financial literacy in South Africa. This was no different for university students for studies that focused specifically on this segment of the population. Financial literacy levels of South Africans are low, irrespective of which definition or measurement metric is considered.

Shambare and Rugimbana (2012) concluded that 17%, 68% and 15% of their subjects (university students at an Eastern Cape university) were financially illiterate, moderately financially literate, and financially literate respectively. Nanziri’s (2016) own measure placed financial literacy average at 48.2 out of 100 (Nanziri, 2016), whilst indicating that individuals below thirty and above sixty, women, black South Africans, those without a matric level education and those at the lower end of the earnings spectrum fared worse than the average.

For the 18-24 age group, a study conducted by Schwella and van Nieuwenhuyzen (2014) in military students in the Western Cape indicated low levels of basic financial knowledge on making ends meet, keeping track of their finances, planning ahead, staying abreast of developments in the financial environment, and choosing appropriate products.

The results of the van Deventer et al. (2014) study deduced that African Generation Y and South Africans in this group demonstrated the greatest propensity to improve their levels of financial literacy. This is due to this group having a positive attitude towards financial management, coupled with the large number of people captured in this group, and their future earning potential makes them the ideal target group for intervention.
The FSB has since 2010 engaged the services of the Human Science Research Council (HSRC) to conduct a survey to assess financial literacy in South Africa. The purpose of the study is to generate information on the levels of awareness, knowledge and understanding of financial literacy and systems at a national level to aid the FSB consumer education department (Struwig et al., 2013). An initial pilot survey was conducted in 2010, with each subsequent survey used to build on the previous studies. The study is carried out on each of the four domains informed by the OECD (OECD INFE, 2011) and provides an overall financial literacy score. The results of each year’s study shown as a score out of 100 is shown in the table below:

<table>
<thead>
<tr>
<th>Domain</th>
<th>2015</th>
<th>2013</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial control</td>
<td>63</td>
<td>61</td>
<td>61</td>
<td>58</td>
</tr>
<tr>
<td>Financial planning</td>
<td>48</td>
<td>48</td>
<td>50</td>
<td>53</td>
</tr>
<tr>
<td>Product choice</td>
<td>46</td>
<td>44</td>
<td>46</td>
<td>45</td>
</tr>
<tr>
<td>Financial knowledge</td>
<td>58</td>
<td>56</td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td>Overall financial literacy</td>
<td>55</td>
<td>52</td>
<td>54</td>
<td>54</td>
</tr>
</tbody>
</table>

Table 1 – Financial literacy scores from FinScope surveys (Roberts et al., 2016)

From the above study, what is clearly demonstrated is that since 2011, there has been only a marginal improvement in financial literacy levels in South Africa.

3.2.6 Solutions to address current levels of financial literacy

The literature reviewed indicates that financial education programmes at all levels may be the most effective means of addressing the current levels of financial literacy in South Africa, with this view being shared by most authors included in the literature reviewed. Specifically, studies quoted by de Beer and Coetzee (2003) demonstrate a direct link between literacy and behaviour.
However, a direct link between literacy and behaviour has proved more difficult to establish, with financial outcomes being used as the key measure for the success of education programmes (de Beer & Coetzee, 2003), with financial education providing confidence, but not necessarily the required skills.

Nanziri (2016) further states that the financial education programme needs to be specifically developed to meet the requirements of the different demographic groups where the content is function and product specific as opposed to a one size fits all approach. Rootman and Antoni (2015) proposes that the focus should be specifically on banking and savings, through improved knowledge, skills, and inclusivity of these products.

Stedall and Venter (2016) proposes that financial literacy programmes be targeted at young couples and young families, given the increased usage of financial products of this segment. Furthermore, the high levels of retail store cards in households mean that a focus on the risks and consequences of short term debt is required.

Another solution proposed include incorporating financial literacy education programmes into the School and University curricula (Shambare & Rugimbana, 2012; Nanziri, 2016; Rootman & Antoni, 2015). The main barriers identified to this proposed solution is that the inclusion of financial literacy programmes in school curricula may be hampered by the lack of skill and knowledge of teachers, both theoretical and practical, to teach financial literacy and who themselves may be financially illiterate, further constrained by the lack of suitable resources and teaching material in the form of textbooks that are simple to understand, being available (Maistry, 2010).

Other solutions include increased government intervention, with policymakers adopting full responsibility for the financial literacy policy and strategy, through co-ordination of activities between stakeholders (Rafera et al., 2016), and community level interventions outside of the workplace by product providers (Shambare & Rugimbana, 2012; Nanziri, 2016).
The literature indicates that additional research may be required for the true levels of financial literacy using some alternate measure as opposed to comparison to a baseline level as is the case with the FSB study.

### 3.2.7 Shortcomings of current programmes

Most programmes are designed considering the requirements of those residing in the developed world, where financial literacy has also been acknowledged as a problem at all levels of society. This is due to most of the research being mainly focused on the developing world (Shambare & Rugimbana, 2012).

The literature does not indicate whether specific South African factors affecting university students, which may prevent positive financial outcomes, such as high levels of student debt, the legacy of apartheid and the resultant financial and economic exclusion, the concept of black tax and the language barriers are incorporated into such programmes. Rafera et al. (2016) further mention that most programmes do not consider socio-economic realities into account, which are critical for inclusion in such programmes.

On the other hand, individuals hailing from affluent families, and a large portion of university students operate in a protected environment, where their parents take responsibility for financial issues, delaying their requirement to be financially literate at university (Louw et al., 2013), so current programmes may not appeal to this group.

There is also a positive correlation between income levels and education, with financial literacy. This could indicate that only those who have the intellectual capacity and the earning potential may proceed towards acquiring financial literacy.

Current programmes available at no cost from the FSB are not widely marketed, so many individuals may not be aware of this programme.

Those programmes that are made available by private providers usually require a fee payment for individuals to access these. For many individuals, this leads them to falsely assume that financial literacy and personal financial planning are only for
the affluent (van Deventer et al., 2014). Furthermore, those private providers offering financial literacy programmes at no cost usually require individuals to be or become clients prior to them obtaining access to information.

For current university students who are known to be technologically astute, and are likely to prefer mobile and online versions of such programmes, very few digital platforms currently exist (van Deventer et al., 2014). This may be a reason for university students not accessing programmes currently available.

In terms of the Financial Sector Charter, companies in the financial sector, specifically those in the banking industry are required to commit a percentage of annual after tax profits aimed at financial literacy initiatives (Financial Sector Charter Council, 2013). Despite many such programmes being introduced since the adoption of the Financial Sector Charter in 2003, a lack of coordination between programmes has resulted in such programmes having minimal impact on overall financial literacy levels (Rafera et al., 2016).

3.2.8 Gaps in literature

A key criticism of all studies reviewed is that they all focus on a specific target group at a specific point in time, with no studies having been conducted on the same cohort of subjects. This may be due to this area of study only getting attention since the financial crisis of 2008. Nanziri (2016) specifically mentions the lack of information on the learning over time that could be generated from longitudinal studies on financial literacy. Improvement in financial literacy over time due to interventions are currently not extensively available.

Most studies have proposed solutions as detailed in section 2.2.7 above, yet very little empirical evidence of the impact of such solutions exist, even in developed countries. The relationship between financial literacy and access to financial products is currently under scrutiny, with Nanziri (2016) observing that whilst a positive relationship exists between the two, it is not clear whether financial literacy leads to individuals accessing financial products, or if using financial services result in financial literacy.
The literature does not indicate why government policy and the initiatives of the FSB have not had the desired levels of success. This may be the result of broader socio economic issues, where financial literacy is but one of a range of societal ills that need to be simultaneously addressed.

The literature is silent on how attitudes and behaviours can be changed, since financial education alone has not had the desired impact.

### 3.2.9 Conclusion

Varying definitions of financial literacy have been historically explored, and different authors have attempted to assign a measure for the different definitions. The definition deemed appropriate for the purposes of this venture is the definition proposed by the FSB which states financial literacy as a complex multi-dimensional concept that comprises a combination of awareness, knowledge, skills, attitude and behaviour, incorporating financial control, appropriate choice of products, financial planning and knowledge and understanding, the four domains informed by the OECD (Struwig et al., 2013). The OECD guideline measurement as used by the FSB would thus also be the appropriate measure in South Africa given the use of a definition of financial literacy informed by the OECD.

Most individuals obtain financial literacy as and when they start using financial products, typically when they enter the workplace. Often, this is deemed too late due to the poor financial outcomes in terms of debt and savings in South Africa, coupled with an increasingly complex financial environment, with more responsibility being shifted to these individuals over time.

The literature is unanimous that financial literacy is a problem in South Africa, which exhibits poor scores in terms of financial literacy and this includes university students who would be the primary target for this venture. Solutions to address this are also proposed in the literature; the most common one being financial literacy programmes with a few authors proposing inclusion of such programmes in school and university curricula.
Current programmes does not seem to be having the desired impact on outcomes, since they may be targeted at an incorrect level and not being tailored to the specific requirements of such groups, whilst the recent attention to this subject mean that many more studies may be required to fully understand this topic, specifically how to address the behavioural, attitudinal and actionable aspects of financial literacy.

The ultimate aim of this research will be to inform the business plan for the development of a financial literacy programme targeted at final year university students after obtaining a measure of the extent of financial literacy and addressing the shortcomings identified of existing programmes.

4 Research Methodology

This chapter provides an overview of the research methodology used to collect, analyse and interpret the data collected to inform the financial literacy venture. The reason for the chosen methodology and the merits thereof are also discussed.

4.1 Research methodology Introduction

A mixed research methodology has been chosen as the method of data collection and analysis, with a quantitative methodology applied to the primary problem, and a qualitative methodology applied to the secondary problem.

The primary problem indicates a lack of financial literacy. The purpose of a quantitative methodology would be to test and affirm the results of studies conducted to date, and specifically to establish the extent of the problem for university students.

Since the secondary problem aims to address the shortcomings of existing financial literacy programmes, the purpose of the qualitative methodology would be to establish from industry role-players shortcomings of existing financial literacy programmes from them.
4.2 Research design

For the primary problem, secondary data has been provided by the FinMark Trust, who conducts an annual household survey which also reports on financial literacy levels. Note that the FinMark Trust is not liable for the analysis or interpretations of the data provided as part of the quantitative research conducted. For the purposes of this venture, the most recent year’s raw data has been mined to provide the insights to the current financial literacy levels of university students.

The main advantage of this method of data collection is that the FinMark Trust conducts comprehensive surveys for the whole population and thus provides a rich dataset, for the specific target group of this venture (university students) as well as other segments of the population to select the control group to assess similarities and differences in financial literacy levels.

The data collection process for the secondary problem entailed an open-ended questionnaire which has taken the form of face to face interviews with industry stakeholders, or responding to a set of questions in writing where the specific stakeholder was unavailable for the face to face interview.

The main advantage of this method of data collection has been the first-hand perspective obtained from the face to face interviews. The reasons as proposed by the industry stakeholders for the shortcomings of current programmes has also been considered to ascertain whether the financial literacy programme developed through this venture may be able to address these shortcomings.

The key disadvantage of this method of data collection is that the individual representing the specific stakeholder may provide their personal viewpoint rather than that of the stakeholder.

4.3 Unit of analysis

Quantitative analysis methodology has been applied to the primary problem using descriptive statistics and statistical methodologies to provide the conclusions.
sought from the analysis. These include the differences and similarities between
the target group and the selected control group.

The qualitative analysis for the secondary problem has taken the form of a narrative
describing the current views, opinions, and perspectives of industry stakeholders
and their reasons for the current shortcomings, and would take the form of a
thematic analysis, and will also aim to provide additional shortcomings not currently
contained in literature reviewed.

4.4 Population and Sample and Population Description

The population of university students has been extracted from the secondary data
obtained from the FinMark Trust, with age being used as the primary filter for
university students (18-44 age group), and then considering those within this group
who have listed “student or learner” as their current occupation. The control group
chosen has been those falling within the same age group, with a specific focus on
those listing “University Degree” as their level of education. The total data consisted
of 5000 data points, of which the 18-44 age group consisted of 3097 model points.
Within this age group, students or learners accounted for 269 model points, whilst
those with a formal university degree accounted for 173 model points.

Industry role-players invited to be interviewed included representatives from the
Financial Services Boar (FSB), the FinMark Trust, the Financial Planning Institute
of South Africa (FPI), the Actuarial Society of South Africa (ASSA), and an industry
expert currently employed at the Alexander Forbes Research Institute.

4.5 The research instrument

For the primary problem, the research instrument is the data captured in the
FinScope Surveys conducted by the FinMark Trust.

For the secondary problem, the face to face interviews will be structured in a way
that obtained insights from industry stakeholders on the following components of
financial literacy and financial literacy programmes:
• Awareness and access of current programmes;
• Information of knowledge, attitudes and behaviour regarding money and financial products;
• Whether programmes are targeted at the correct audience at the correct point in their life cycle;
• Reasons for failings of current programmes;
• The impact of policymakers;
• The external aspects unique to South Africa, including the legacy of Apartheid, the concept of Black Tax, and other external factors experienced globally such as that of the Sandwich Generation, and generational differenced such as Baby Boomers, Generation X, and Millennials; and
• Whether financial literacy programmes can be customised to embrace digital technologies, be tailored specifically to the needs of the South African population, overcome language barriers and address the socio economic realities of poverty, unemployment and inequality in South Africa.

4.6 Procedure for data collection

The data for the primary problem has been collected in raw format directly from the FinMark Trust, whilst the data collection methodology for the secondary problem has been collected directly through face to face interviews or in writing as applicable.

4.7 Data analysis method

The data analysis methodology will be quantitative and qualitative focusing on synthesis and analysis by comparing the target group (university students aged 18-44) to the control group (university graduates aged 18-44). The split within these groups is shown in the graph below.
As expected, the majority of subjects in the 18-29 age group are still currently listed as university students, whilst the majority on the 30-44 age group are listed as university graduates.

The specific control group was chosen to ascertain how an individual’s situation would change in terms of usage of financial services products and attitudes and behaviours to financial matters once individuals progress from students to graduates. This is primarily to serve as a proxy for likely outcomes in the absence of longitudinal studies being available currently for this purpose.

4.8 Conclusion

To summarise the research methodology, a mixed methodology will be applied to the venture, with a quantitative methodology applied to the problem of financial literacy. This has been based on secondary data obtained from the FinMark Trust. A qualitative methodology has also been applied to the problem of the failings of existing financial literacy programmes, with information gathered through face to face interviews conducted with industry stakeholders.
5 Presentation and discussion of results

5.1 Introduction

The key outcomes of this study is to confirm the level of financial literacy of university students and to identify the reasons current programmes to address financial literacy levels are currently failing. This chapter analyses the data obtained from the FinMark Trust to assess the level of financial literacy and the qualitative interviews conducted with industry stakeholders to identify reasons for the failings of current programmes available in the market.

In the next section, the results of the analysis of the quantitative research are presented, whilst the third section provides the outcomes of the qualitative research.

5.2 Quantitative research results

From the FinMark Trust data, responses to the following questions and the financial literacy reasons for them not responding in the positive to these questions based on the FinScope survey was used to assess the financial literacy of the respondents of the target group.

- Their current banking status, informed by whether they currently held a bank account in their own name;
- Their current debt status;
- Whether they were currently insured; and
- Whether they held savings products.

Current behaviours and attitudes regarding financial products are also used to assess financial literacy. The following behavioural and attitudinal factors from the FinScope Surveys were considered:

- Having enough money to save;
- Withdrawing all money in the bank account as cash as soon as it is deposited;
- Worries about retirement;
- Dealing with personal finance matters were stressful;
- The language used in financial product paperwork were confusing;
- Having a budget;
- Keeping track of money habits;
- Know of the Ombudsman;
- Use of financial services makes you in control of your finances;
- Financial Institutions are generally difficult to deal with;
- Financial products are carefully considered for your situation;
- Difficulty of getting information on products;
- Satisfaction with current products used;
- Looking out for better products;
- Being kept up to date by institutions currently used for products;
- Stressful to switch between products;
- Choose not to change products even if you know it is better to do so;
- Financial security is important to you; and
- Buy something on credit rather than wait.

The results of the analyses of both the product use, knowledge of products and behaviours and attitudes are presented individually below, with the factors then used to create a financial literacy score.

5.2.1 Knowledge and use of financial products

For both the target group, and the control group, the use of financial products, and knowledge of these products are presented below. The results are also discussed, with qualitative inferences drawn from the results presented.
5.2.1.1 Bank Account

Usage of bank accounts has been considered based on the number of subjects indicating that they have a bank account in their own name. Only 46.5% of university students held a bank account in their own names compared to just over 95% of University graduates. This is not unexpected given that most university graduates will either enter formal employment in the public and private sectors, or go into private practice, where having a bank account will be a necessity to receive one’s salary or conduct one’s business.

Amongst the university students not having a bank account in their own names, not knowing what a bank account is or how to open a bank account was not listed as a major reason for them not having a bank account. Just over 56% of those who did not have a bank account in their own name indicated that this was due to them being a student. The analysis of the control group indicates that students do in fact open a bank account upon graduation. Thus, knowledge of banking products appear to be good with the target group.

5.2.1.2 Current Debt status

Approximately 20% of current university students currently have some form of formal debt, compared to 85% of university graduates. The overwhelming majority of respondents in both categories (88%) know what debt is and how to go about accessing debt. Debt levels increase considerably once students have completed their studies. This is consistent with the percentage having a bank account in their own names, since it would be impossible for subjects to access debt if they didn’t have a bank account in their own names.

5.2.1.3 Insurance products

Insurance products are typically used by individuals who need to protect their health, income, assets or for those who have dependants reliant on them financially.

University students are unlikely to have a need for insurance products. This is evident from the responses by university students that 87% hold no form of
insurance. 78% of the control group holds insurance either through their banks (38.2%) or other formal institutions, possibly insurance companies.

The banking insurance may be as a result of the high debt levels within the control group. Respondents in both categories had an idea of what insurance is and how to go about procuring it. A lack of knowledge was not listed as a key reason for them not having insurance products. However, only 40% of university students felt that they were currently too young to have any form of insurance.

5.2.1.4 Savings Products

University students are poor savers. 88% of university students currently do not save compared to just over 25% of university graduates. The lack of savings is not attributed to the lack of knowledge of savings products, or the lack of knowledge of how to access savings products.

While savings levels increase upon the completion of university studies, what is concerning is the low level of savings earmarked for retirement by the control group. Only 40% of university graduates currently have some form of saving for retirement. This explains the reasons for the low levels of savings at retirement (9 out of 100 have saved sufficient to retire comfortably (Financial Services Board, 2017), where it is imperative for individuals to start saving for retirement as early as possible to yield the desired retirement outcomes.

5.2.2 Behaviours and attitudes towards financial matters

This section considers the behaviours and attitudes of the target group and the control group to financial matters. The FinScope Surveys records responses to behavioural and attitudinal factors. The factors listed below are the exact statements respondents were required to answer in the FinScope Surveys.

Only valid responses were considered for the results below. Where a respondent indicated that they did not know how they felt about a specific statement or where the statement was not relevant to the individual respondent, the response was recorded as being invalid for purposes of the analysis. After removing invalid
responses, a total of 166 responses for university students and 166 responses for university graduates were included in the results reported below.

5.2.2.1 Attitudinal Factors

The graphs below provides the results for the attitudinal factors considered appropriate for this Study from the FinScope surveys. The results of each factor are shown below. The attitudinal questions were reported on two different ordinal scales, and as such, the results have been reported separately for the two sets of factors.
Figure 2 – Financial Attitudes scale 1

<table>
<thead>
<tr>
<th>Financial Attitudes</th>
<th>No - Students</th>
<th>No - graduates</th>
<th>Sometimes - students</th>
<th>Sometimes - graduates</th>
<th>Yes - students</th>
<th>Yes - graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>You are worried that you will not have enough money for retirement</td>
<td>67.3%</td>
<td>60.1%</td>
<td>12.7%</td>
<td>17.7%</td>
<td>20.0%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Dealing with personal finances is stressful</td>
<td>41.5%</td>
<td>30.7%</td>
<td>25.2%</td>
<td>36.7%</td>
<td>33.3%</td>
<td>32.5%</td>
</tr>
<tr>
<td>You find the language used in financial paperwork confusing</td>
<td>62.8%</td>
<td>18.6%</td>
<td>18.6%</td>
<td>31.7%</td>
<td>18.6%</td>
<td>12.4%</td>
</tr>
<tr>
<td>You have heard of Ombudsman</td>
<td>49.7%</td>
<td>4.1%</td>
<td>5.8%</td>
<td>3.1%</td>
<td>12.5%</td>
<td>44.4%</td>
</tr>
</tbody>
</table>

DEALING  W I T H  P E R S O N A L  F I N A N C E S  I S  S T R E S S F U L
Y O U  H A V E  H E A R D  O F  O M B U D S M A N

34
**Figure 3 – Financial Attitudes scale 2**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree - Students</th>
<th>Disagree - Graduates</th>
<th>Neutral - Students</th>
<th>Neutral - Graduates</th>
<th>Agree - Students</th>
<th>Agree - Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since you started using financial services, you feel much more in control of your financial situation</td>
<td>25.8%</td>
<td>40.6%</td>
<td>33.1%</td>
<td>33.8%</td>
<td>33.1%</td>
<td>33.8%</td>
</tr>
<tr>
<td>You think that financial institutions are generally difficult to deal with</td>
<td>33.0%</td>
<td>30.2%</td>
<td>31.8%</td>
<td>34.3%</td>
<td>34.3%</td>
<td>34.3%</td>
</tr>
<tr>
<td>You generally find it difficult to get good information about financial products</td>
<td>34.1%</td>
<td>44.6%</td>
<td>31.3%</td>
<td>29.3%</td>
<td>34.1%</td>
<td>34.1%</td>
</tr>
<tr>
<td>In your household, you are satisfied with the financial products and services that you use</td>
<td>28.3%</td>
<td>34.3%</td>
<td>35.9%</td>
<td>37.6%</td>
<td>35.9%</td>
<td>37.6%</td>
</tr>
<tr>
<td>The financial institutions you use regularly keep you up to date with new products and services to consider</td>
<td>5.8%</td>
<td>10.5%</td>
<td>31.8%</td>
<td>22.6%</td>
<td>5.8%</td>
<td>10.5%</td>
</tr>
<tr>
<td>You find it stressful to switch between financial products</td>
<td>7.1%</td>
<td>2.9%</td>
<td>31.3%</td>
<td>34.3%</td>
<td>7.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Financial security is very important to you</td>
<td>55.6%</td>
<td>72.9%</td>
<td>82.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attitudes towards financial matters do not vastly differ between university students and university graduates. Approximately eighty percent of both groups are not worried, or only sometimes worry about not having enough money for retirement, yet eighty two percent of university graduates and seventy two percent of university students feel financial security is important to them. This could indicate that the focus of these groups are on the present as opposed to the future, possibly providing the main reason why retirement outcomes are poor in South Africa.

A third of both groups feel dealing with financial matters are stressful, although the majority (approximately sixty percent) in both groups find the language used in financial paperwork understandable. This includes having to switch between different financial products. A third of respondents in both groups felt that dealing with financial institutions are difficult, yet thirty five percent of university students and forty five percent of university graduates found it easy to obtain information on financial products. Thirty five percent of university students and fifty four percent of university graduates indicated that the financial institutions they used regularly communicated with them to keep them updated on new products and services for them to consider using. This indicates that access to information and dealing with financial institutions is not a problem for these groups. The main source of the stress seems to be the act of having to make decisions related to financial matters.

Fifty six percent of university graduates feel they are in control of their financial situation as opposed to only thirty four percent of university students. Similarly, fifty eight percent of university graduates were satisfied with the financial products they used as opposed to thirty eight percent of university students. Twenty eight percent of university students were dissatisfied with the financial products they used, with only 6% of university graduates sharing this sentiment. There appears to be an improvement in financial control and satisfaction once students graduate.

The majority have not heard about the ombudsman, indicating that both groups will not know where to seek recourse if they are dissatisfied or aggrieved with financial products.
5.2.2.2 Behavioural Factors

The graphs below provides the results for the behavioural factors considered appropriate for this Study from the FinScope surveys. The results of each factor are shown below. The behavioural questions were reported on two different ordinal scales, and as such, the results have been reported separately for the two sets of factors.
Figure 4 – Financial Behaviours scale 1

- **YOU HAVE ENOUGH MONEY FOR SAVING AFTER COVERING ALL YOUR SPENDING NEEDS**
  - No - Students: 28.7%
  - No - graduates: 14.8%
  - Sometimes - students: 9.0%
  - Sometimes - graduates: 30.6%
  - Yes - students: 40.5%
  - Yes - graduates: 20.8%

- **AS SOON AS MONEY IS DEPOSITED INTO YOUR ACCOUNT, YOU TAKE ALL OF IT OUT**
  - No - Students: 81.8%
  - No - graduates: 34.4%
  - Sometimes - students: 11.5%
  - Sometimes - graduates: 6.7%
  - Yes - students: 6.1%
  - Yes - graduates: 4.7%

- **YOU HAVE WRITTEN UP A PLAN OR BUDGET OF YOUR SPENDING AND EARNINGS TO MAKE SURE THEY BALANCE**
  - No - Students: 81.1%
  - No - graduates: 39.5%
  - Sometimes - students: 10.6%
  - Sometimes - graduates: 21.5%
  - Yes - students: 30.0%
  - Yes - graduates: 28.7%

- **YOU KEEP TRACK OF MONEY YOU GET AND SPEND**
  - No - Students: 8.6%
  - No - graduates: 19.9%
  - Sometimes - students: 22.7%
  - Sometimes - graduates: 28.7%
  - Yes - students: 51.5%
  - Yes - graduates: 18.8%
Figure 5  Financial Behaviours scale 2
While financial attitudes for the two groups considered are roughly similar, behaviours relating to financial matters differ considerably between the two groups.

Seventy six percent of university students spend all their money every month compared to twenty nine percent of university graduates. This is the main reason for the low savings rate. Only forty two percent of university students use the bank account to store the money they have compared to over eighty percent of university graduates. Students thus use the bank account as a means of getting cash, with fifty eight percent of them sometimes or always withdrawing money from their bank accounts as cash as soon as it is deposited. Only eighteen percent of university graduates behave this way, thus using a bank account as a means of receiving cash.

Over eighty percent of university students to not have a budget whilst fifty nine percent of them do not keep track of the money they get and spend. These statistics improve once these students graduate. Only forty percent of university graduates do not have a budget and only twenty percent of them do not keep track of the money they get and spend. However, the poor behaviours are carried through once students become graduates. Only thirty nine percent of university graduates regularly keep a budget and only fifty one percent of them keep track of their money matters. Forty percent of graduates and thirty percent of university students would rather buy something on credit rather than save for it first. This indicates that the majority of students do not improve their behaviours once they graduate.

Regarding financial products, only fifty two percent of university graduates and thirty nine percent of university students have carefully considered products specifically based on their personal situations. Once products have been chosen, roughly half of respondents in both groups would continue keeping an eye out for better products in the market. Forty percent of university graduates and thirty percent of university students would then willingly choose to remain on an inappropriate product if a better product is available due to the stress involved with changing or switching products.
5.2.3 Computation of financial literacy scores

Financial literacy scores have been computed for each respondent in each group. The scores have been allocated based on the matrix shown in Appendix 1 with higher scores allocated for those responding as currently using financial products, those demonstrating knowledge of financial products, those having a positive attitude towards financial matters and those whose behaviours result in favourable financial outcomes. A score is allocated to each of the four factors listed above, which are then collated to give an overall financial literacy score.

The total score is an arithmetic average of the scores of each factor, thus ensuring each factor has an equal weighting in the final financial literacy score computed. The average score per criteria as well as the total scores out of 100 are summarised in the table below for each group:

<table>
<thead>
<tr>
<th>Factor</th>
<th>University Students</th>
<th>University graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Use</td>
<td>42.4</td>
<td>86.8</td>
</tr>
<tr>
<td>Product Knowledge</td>
<td>98.0</td>
<td>86.4</td>
</tr>
<tr>
<td>Financial Attitudes</td>
<td>35.3</td>
<td>56.6</td>
</tr>
<tr>
<td>Financial Behaviours</td>
<td>31.6</td>
<td>48.9</td>
</tr>
<tr>
<td>Total score</td>
<td>51.8</td>
<td>69.7</td>
</tr>
<tr>
<td>Total score excluding product use</td>
<td>55.0</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Table 2 – Financial literacy scores computed

From the above financial literacy scores, it is evident that university students exhibit lower levels of financial literacy compared to university graduates. The
improvement in literacy levels of university graduates is as a direct result of increased product usage. Even if product usage is not considered as a factor, the levels of financial literacy exhibited by university graduates is still higher compared to university students. There is a marked improvement on both behavioural and attitudinal factors, although the levels of product knowledge reduces, possibly due to this group being exposed to more sophisticated financial products as soon as they enter the workforce.

Despite there being an improvement in relative scores once students graduate, the level of overall literacy is still considered low, with university graduates scoring an overall 64 out of a total 100 points. Thus, there remains merit in addressing the financial literacy levels for university students. Given the failings of current financial literacy programmes discussed in the sections that follow, and the level of financial literacy improvement, there remains scope to increase the scale of which financial literacy levels improve as soon as university students graduate.

5.2.4 Conclusion

In this section it has been established that compared to university graduates, university students do not use financial products extensively. This does appear to change once they have completed their studies. A lack of knowledge of products, or how to access products is currently not a constraint for current university students to access products. This is supported by the high product utilisation demonstrated by university graduates.

In terms of attitudes towards financial matters, there appears to be marginal differences in attitudes between university students and university graduates. However, a higher proportion of university graduates do exhibit more positive attitudes compared to university students, and this is clearly evident when financial literacy scores are computed for this factor.

When it comes to behaviours regarding financial matters, university graduates appear to exhibit better behaviours compared to university students. The
differences in behaviours between the two groups are substantially different, and this is again evident from the financial literacy scores computed for this factor.

Overall, university graduates exhibit higher financial literacy scores due to them making greater use of financial products compared to university students. Even when excluding product usage from the financial literacy calculations, university graduates still score higher. This is due to them being forced to develop some level of financial literacy as they begin using financial products. However, despite the higher relative financial literacy scores compared to university students, the overall level of financial literacy is still deemed quite low, with this group scoring an overall 64 out of a total of 100 points.

The conclusions drawn from the above is that financial literacy levels are low even for university graduates whom one would assume to have the intellectual capacity to deal with financial matters. Financial literacy levels are particularly poor for university students making them an ideal target market for intervention in the form of a financial literacy programme. The outcome of this intervention would be to improve the scale of improvement in financial literacy levels of university students upon graduation.

5.3 Qualitative Research Results

From the informal face to face interviews conducted, the themes that have emerged from the different industry stakeholders are detailed in the sections below. The results are presented in a manner indicating the key shortcomings on the reasons for the failure of existing financial literacy programmes in the market.

There currently exist a vast range of financial literacy programmes that are provided by various product providers, as well as programmes provided by industry bodies such as the Actuarial Society of South Africa, the Financial Services Board, and the Financial Planning Institute of South Africa amongst others.

The different stakeholder views are detailed in the sections below based on a range of themes.
5.3.1 Awareness and Access of Current financial literacy programmes

From the research, it emerged that there is currently a proliferation of financial literacy programmes available in South Africa, but many individuals are not aware of where or how to access such programmes, and in most instances are of the view that these programmes are too costly for them to access. This is a serious misconception by individuals, since programmes rolled out by industry bodies are usually provided at no cost to the individual.

Two respondents indicated that there currently exist a huge gap in terms of access for the secondary and tertiary education sectors of the market. As identified in the literature review, most programmes are geared towards those in formal employment. Thus, these sectors of the market usually access literacy from their parents, siblings and other role models who themselves may be financially illiterate and are not exhibiting positive attitudes and behaviours towards financial matters.

Two respondents also indicated that it was actually education itself, rather than financial literacy education that is an issue in South Africa. A large portion of the South African population have no formal education at all. Thus the household surveys conducted by the FinMark Trust through the FinScope surveys on awareness and access may capture individuals that have had no exposure to education at all, let alone financial literacy education. Financial education is but one aspect that cannot be looked at in isolation.

Overall, access of such programmes and access to financial products is certainly not a problem in South Africa for the majority of the population, with high levels of financial inclusion, although initiatives at secondary and tertiary education level are not sufficiently catered for. Knowledge of these programmes is however severely lacking. Furthermore, current programmes are too one dimensional focusing on only one aspect at a time. Financial literacy programmes need to focus on literacy, awareness, decision making and outcomes as opposed to any one of these factors in isolation.
5.3.2 Information of knowledge, attitudes and behaviour regarding money and financial products

There was no consensus about knowledge, attitudes and behaviours regarding money and financial products. One respondent felt that these factors were hugely influenced by the economic environment at a point in time, whilst another felt the employment status and earning levels played a key role in these factors.

Poor money attitudes and habits were mainly due to a lack of knowledge of the implications and consequences of individuals making financial decisions. Another respondent felt that whilst individuals may have adequate financial literacy, this was not sufficient given that entire households needed financial literacy, since the behaviours of a household was what needed to be focused on rather than on individuals within a household, given that it was often difficult to get all individuals within the same household to exhibit the same attitudes and behaviours regarding money and financial products due to South African specific factors and other global factors discussed in Section 5.3.6 below.

Studies on knowledge, attitudes and behaviours often ignore the choice made by individuals irrespective of knowledge and attitudes, often as a result of external pressures such as the economic climate and household demands. Behaviours also change as an individual’s circumstances change, such as employment status, family structure and existing levels of savings, amongst others.

One specific respondent felt strongly about cultural issues affecting attitudes and behaviours, and felt that the current situation in South Africa should not come as a surprise. The current culture is one of short term thinking and instant gratification compounded by a culture of mistrust resulting in a culture of spending as opposed to saving, i.e. low levels of financial literacy results in individuals not trusting the financial environment, thus leading to them satisfying immediate needs through spending rather than thinking about the long term future.

The lack of financial literacy of current role models including parents, elder siblings, teachers and community leaders adds to this culture sustaining poor financial habits
of generations that follow. Choices made by individuals actually distort the findings of these factors in research that has been conducted to date.

5.3.3 Targeting the correct audience at the correct time

The common theme from the research was that in the majority of instances, financial literacy programmes are targeted at the correct audiences, typically those earning an income who would be required to make financial decisions, but that these programmes did not take place at the right time in one’s life cycle. Current programmes are static and apply the one size fits all model to the entire population, with this not being appropriate.

All respondents were unanimous that the best time for an individual to be exposed to financial literacy programme was as soon as they entered the workforce, either upon landing their first job, or through the informal sector, and to educate on how to put the correct framework in place to manage money from the first pay check. This is because the first level of real understanding takes place when someone starts working. One respondent felt that to achieve better outcomes in the long term, the audience of such programmes should solely focus on the young (university students, new entrants to the workforce), so that these individuals would then become ambassadors for financial literacy in the future, thus correcting the current shortcomings one generation at a time.

In addition, respondents felt that a once-off programme was not sufficient for the population given that new decisions would need to be made each time an individual experiences a life event, such a marriage, birth of child, etc. Thus, following an initial programme upon entering the workforce, there needs to be additional programmes available to ensure the continued education as one becomes more financially sophisticated, and as one’s needs evolve due to life events. Mobility in the workforce currently makes this even more important, as individuals can be targeted for follow up programmes each time they start a new job.

Life stage financial literacy programmes are still in its infancy. Programmes are targeting getting people in the informal sector into formal sector and this is where
the disconnect between literacy and outcomes primarily lies, mainly as a result of a lack of trust of the formal sector due to a lack of understanding.

From an audience perspective, programmes need to be demarcated to specific groups and then further refined to groups within broad categories, e.g. there needs to be a programme for women, but then the programme needs to be further differentiated between rural and urban women, and then within these groups between married and single women, and so forth.

There is an increased need to target young people, as they haven’t seen major problems yet financially, and thus haven’t made big mistakes to serve as their financial literacy lessons.

Another key finding is the different generational requirements in terms of financial literacy. The baby boomer generation has completely different requirements to those of Millennials, and so programmes need to address these as well. This is affecting behaviours and attitudes towards financial matters. Retirement Funds for example are currently not relatable to Millennials given that this generation lives in a real time world of social media, living in the moment and not being aware of their thoughts which they have posted to social media five minutes ago, and having to then consider something that will only affect them up to forty years in the future.

5.3.4 Reasons for failings of current programmes

The roll-out of current programmes lack co-ordination, with each stakeholder trying to punt their own offering without much consideration being given to what other parties may be providing. Thus the conclusion is that the current programmes are not being efficiently provided by the different industry stakeholders, resulting in an inefficient allocation of mainly financial resources. The disjointed approach to providing such programmes also results in a lack of accurate measurement of the impact such programmes may have.

This is one of the key reasons for financial literacy programmes not having the desired outcomes. At least two respondents felt that outcomes could be improved
if resources and initiatives are centralised and provided by one body, possibly an industry body in conjunction with government entities and policymakers.

Current programmes are also usually a once off initiative, with no follow up sessions or support structures provided to individuals being exposed to these programmes. These programmes are structured to provide very basic awareness, but no subsequent initiatives to initiate behaviour change, and no measurement of whether the desired outcomes of the programme have been achieved. Programmes are also currently being rolled out on a trial and error basis, with the industry still searching for what will work or not with the current population.

Programmes are also typically provided by financial product providers, mainly due to there currently being no incentives for anyone aside from policymakers and product providers to provide financial education. Policymakers are constrained by the lack of resources, but product providers leverage their corporate social investment initiatives and marketing budgets for this purpose. However, corporate social initiatives are often seen as brand building initiatives rather than really making a social difference.

Education is usually focused on products which are currently in existence. Thus, if there is currently no product to meet a specific financial need, then there would be very limited education on that specific financial need. A primary example of this phenomena is the concept of Black Tax discussed further below. In addition, there does not seem to be sufficient incentives for ensuring the correct behavioural outcomes to product providers with their return on investment measured based on the successful sale of their products.

Another drawback of programmes being provided by product providers is that there is no indication within the programme as to where education on financial literacy ends, and marketing of financial products commences. This often results in confusion for those being exposed to such programmes, further exacerbating the lack of trust of the formal financial services sector, since these programmes are increasingly seen as marketing pitches even if their aim may well be financial literacy.
Financial literacy programmes are also not usually accredited by educational institutions. Thus, a certificate of attendance, a certificate of competence, and a certification of financial literacy, thus formalising these programmes may result in individuals taking such programmes seriously, and having better overall outcomes in terms of behaviour, attitudes and knowledge.

All respondents identified current programmes being unsuccessful due to these programmes not being authentic or being relatable to the actual operating environment. Most learnings take place from your own experiences or from the experiences of those closest to you. Programmes thus need to be experiential rather than conceptual or theoretical. Emotional and aspirational aspects of living then also need to be incorporated into these programmes. These programmes would also need to be customised to cater for different types of learnings, either through formal lectures, workshops and online digital platforms or through independent study.

Lastly, programmes are failing because they are not being conducted by the correct types of people. It was felt that such programmes need to be conducted by education experts, or those with an education background. However, the same respondent felt that educators did not have the financial knowledge, so there is a requirement to perhaps upskill educators in financial matters, or financial experts in education matters.

Another respondent felt that delivery of programmes cannot be done by those that are product providers, whilst another felt that community leaders, student leaders and other influential people within a group of people need to be empowered to deliver such programmes. Initiatives handled by insiders as opposed to outsiders are likely to yield favourable outcomes.

The human resources division in the workplace was also identified as an area where the knowledge gap lies. Human resources practitioners are not financial educators, yet people approach them in the workplace when there are financial matters that need to be dealt with, usually when an individual’s personal circumstances change.
They could form a key entry point for programme providers to deliver financial literacy programmes.

5.3.5 **The role of policymakers**

There was a common view that policymakers had a larger role to play in financial literacy initiatives than is currently the case. These include directly providing financial literacy initiatives, setting of education curricula, developing enabling legislation, and developing incentives for the current financial services industry to focus on better outcomes.

A large emphasis was placed on why policymakers cannot do much to influence the education curricula to include financial literacy. The resource constraints, and the skills gap of educators on financial matters have been discussed above. In addition, financial literacy cannot be added to school curricula due to the current curricula overload at primary and secondary education level. If financial literacy is to be added to these education levels, some other aspects of the current school curricula would need to be removed. In addition, the individuals at these levels are unlikely to be exposed to broader financial services, so education at this level would need to take the very basic form.

There was however no valid reason as to why financial literacy programmes are currently not included as part of tertiary education curricula, since this programme could simply be added as a compulsory module to all qualifications and given the fact that universities are usually in control of the courses they offer, and are at liberty to set their own curricula. Policymakers could assist in addressing the constraints faced by universities, specifically pertaining to resources and expertise in providing financial literacy programmes.

Policymakers can also influence the legislative environment to enable better outcomes with respect to such programmes. One respondent felt that the legislation needs to perhaps change. Policymakers could also implement legislation to clearly demarcate education initiatives from marketing initiatives and to ensure focus is on outcomes rather than on profits.
5.3.6 The external aspects unique to South Africa,

External factors have been identified as the legacy of Apartheid, the concept of Black Tax, and other factors also experienced globally such as that of the Sandwich Generation, and generational differences.

Most respondents agreed that the unique factors faced by South Africa is having a significant impact on financial literacy levels. The legacy of apartheid has left a large proportion of the population living in poverty, and has resulted in households consisting of extended families, resulting in phenomena such as black tax where the young newly educated member of a household is required to financially support other members of the household, including extended families. In addition, South Africa also has a sandwich generation of individuals currently looking after their parents and adult children.

All of the above currently place a strain on financial outcomes of individuals irrespective of their current levels of financial literacy. Adding to these factors is the product environment in South Africa. In South Africa, this is made worse by the migration of individuals from the informal sector to the formal sector, with the increase in the sophistication of formal products requiring greater levels of financial literacy.

As mentioned above, products usually dictate the availability of education on financial matters. Thus, there is very little education on the trade-off between risk and reward, causing people to fall for scams in search of quick results. Products also haven’t evolved to be relevant to the current environment. An example used by one respondent is that the current pension fund model of saving in one fund over a period of forty years, and then drawing a pension from this fund at retirement worked well in the old days when an individual typically worked for one company their entire life. The structure of this product, as well as legislation governing this product has not evolved to cater for the increased mobility in the workforce.

Product providers also have not created products to meet the specific needs of the communities in South Africa to help them understand the concepts of savings, investments and insurance. Products are also not sufficiently differentiated between
product providers, so product competition and value added services of these products are not fulfilling the marketing functions of these products, which is why products need to be pushed or miss-sold to the market.

A final aspect identified in South Africa is the current disparity between the educated and the uneducated. There is a view that professionals in all industries are currently not doing enough to aid the financial literacy initiatives. In addition, those with the knowledge seldom share this knowledge, with industry experts on financial matters often not volunteering their time towards financial literacy initiatives.

5.3.7  How programmes can be further improved

There was a general consensus that there currently appears to be minimal incentives for individuals to change their current attitudes and behaviours to achieve better financial outcomes. An example cited of a successful incentive currently available was that of the National Credit Regulator, where an individual who stuck to their debt counselling plan had the reward of expunging a poor credit record upon completion of payment of debt as per the plan. Further initiatives for saving and insurance need to be developed to encourage individuals to improve their behaviours.

People need to be enticed to change their behaviours and that good behaviour has to be rewarded. The concept of delayed gratification and the means for instilling this behaviour into individuals need to be explored and developed. This includes fashionable initiatives to get individuals to spend what’s left after saving, living within one’s means, and having defined goals based on one’s needs.

Programmes should also be delivered in one’s mother tongue. Language has been identified as a major barrier to financial literacy programme delivery, since English is not the first language for the majority of the South African population. Thus the message usually delivered in English may not be reaching its intended audience.

Most respondents identified the profit motive of providers of financial literacy programmes being a major constraint to achieving successful outcomes. Whilst
corporate providers may take the altruistic view on financial literacy initiatives, it is often not possible to separate the financial sector from the education sector and divorce the profit motive from the social motive.

Product providers have all the incentives to provide financial literacy programmes. Education will ultimately help them generate profits as more individuals buy the correct formal products for their specific needs from the product providers.

A defined conflict of interest policy and a full disclosure in terms of profit motive and marketing initiatives need to be declared upfront by the providers of financial literacy programmes. This would ensure that the consumer is aware of any vested interests and can make an informed decision leading to improved financial outcomes.

One respondent identified the pressing need for longitudinal studies to be conducted to better understand the behaviour of individuals over time. Banks and pension funds were best placed to conduct such longitudinal studies, and there was perhaps a need for policymakers to incentivise these institutions to conduct longitudinal studies to aid in improving existing financial literacy initiatives.

Lastly, the current programmes could be further customised to include digital platforms and different learning styles. A digital initiative could also aid with providing regular education over a person’s life cycle, and ongoing support. In an ideal world, such a programme should be provided by a vendor that is independent of any product provider.

5.3.8 Conclusion

Extensive insights on financial literacy programmes, their shortcomings and areas of improvement have been gained from the qualitative research as documented in Section 5.3. The insights gained from this research have been used to inform the business plan for the social entrepreneurship venture detailed in Section 6.
6 Business Plan

6.1 Introduction

This section provides a business plan for the social entrepreneurship venture to create a financial literacy programme for final year university students. A business model canvas is provided to summarise the key components of the venture, followed by a financial plan and a strategic analysis.
### 6.2 Financial Literacy Programme Social Entrepreneurship Business Model Canvas

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<td>Industry bodies</td>
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<td>o Financial literacy</td>
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<td>• 191,000 graduates in 2015 and growing each year</td>
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<td>o FinMark Trust</td>
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<td>• IT infrastructure</td>
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<td>• Financial resources</td>
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<td>o Teachers and coaches</td>
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<td>• Personalised client relationship managers for universities.</td>
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<tr>
<td>• A lean cost structure</td>
<td>• Course fee</td>
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<tr>
<td>• Costs include course development, website design, website hosting, mobile</td>
<td>• Donor Funding</td>
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<td>applications design, IT security, business continuity and recovery, office</td>
<td>• Sponsorships</td>
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<td>space, physical lecture rooms, IT infrastructure, salaries, marketing, and</td>
<td>• Government grants</td>
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<td>taxes, amongst others</td>
<td>• Corporate CSI initiatives</td>
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<td>• Human resources, IT infrastructure likely to be the largest cost</td>
<td>• Industry Stakeholder funding through FSC</td>
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<td>• Costs can be reduced by utilising university infrastructure</td>
<td>• Advertising revenue from online platforms</td>
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Table 3 – Business Model Canvas for financial literacy programme for university students
6.2.1 Customer Segments

The venture is to focus on only one segment of the South African population, being final year university students as the primary customer segment. From the research conducted, it has been established that the best time to target individuals for such a programme would be just before they enter the workforce. The research also indicates that this segment of the market is currently underserved.

This narrow segment has been chosen for this venture due to the likelihood of university graduates finding employment. Furthermore, university students currently exhibit low levels of financial literacy, making them an ideal group to mould into developing the correct attitudes and behaviours regarding financial matters.

The market size of this segment currently number approximately 191,000 as measured by the number of graduates in 2015, with the growth in graduates of 4.5% per annum since 2010 (Council on Higher Education, 2016) (Council on Higher Education, 2017). Thus, the potential for this venture to be successful remains high, with the venture reaching up to 191,000 individuals annually.

A secondary segment identified is universities currently active in South Africa. The main value for universities would be to enhance their current offering in terms of courses offered thus creating an opportunity for differentiating their offering to the universities they compete with. There are currently twenty five public tertiary institutions in South Africa (Council on Higher Education, 2017).

6.2.2 Value propositions

The value proposition of the venture is discussed below for individuals being the main customers of the venture (final year university students), society at large, to the financial services industry and to universities.

6.2.2.1 Final year university students

The main value to final year university students would be to attain financial literacy and financial inclusion ultimately resulting in financial literacy. It would empower
them to navigate a highly complex financial services environment, thus aiding them to avoid making costly financial mistakes regarding their personal financial matters.

Given that the programme is proposed to be included in the university curriculum, another value to university students would be the seamless integration of the programme into their university schedule, thus not requiring them to set aside specific time outside of their studies to pursue financial literacy. This would include any fees that may be applicable, since the fee for the programme (if any) can be included in the normal university fees in the final year of study.

The delivery platform for the programme will be structured in a manner which will permit ongoing education and support on financial matters. Thus, through the programme, university students will derive lifelong value.

### 6.2.2.2 Society

The key value derived by society due to university students being or becoming financially literate would be the added benefit of these individuals, who are likely to have high earning capacity by virtue of becoming university graduates making the correct informed choices about their personal finances. This would result in the following benefits to society:

- Reduced scams;
- Reduced burden on the state;
- Reduced regulatory requirements;
- Contribution to economic stability and economic growth;
- Increased savings and investments; and
- Reduction in poverty.

University students could also become ambassadors for good financial attitudes and behaviours in the communities where they reside, thus extending the benefits of financial literacy to their communities.
6.2.2.3 Financial Services Industry

The value of financial literacy to the financial services industry would be immense. The negative perceptions and the lack of trust of the industry can be greatly reduced. The value to the financial services industry are amongst others:

- An increased demand for products and services of financial services companies;
- Job creation for financial advisors as more financially literate individuals use the services of financial advisors;
- Reduced levels of compliance and regulatory requirements;
- Increased market share;
- Increased competition within the industry, resulting in the industry providing greater value for consumers; and
- The industry can focus on innovations around their product offering to cater for a financially literate segment of the population.

6.2.2.4 Universities

The main value to universities could be an additional source of revenue if the university levies a fee for this programme as they would for any other university modules offered. In addition, the university would not need to commit any human resources towards course development and delivery. Universities could also create a competitive advantage for themselves should other universities not choose to offer the programme.

6.2.3 Channels

Given the customer segment identified, the primary channel of reaching the target market would be through the university curriculum. It is envisaged that the programme will be included in all university degrees as a core module, thus making it compulsory for students to undertake this programme.
This would be a cost efficient means of engaging the target market. Other channels that will be considered include any online learning portals currently used by the universities to deliver their courses.

Following the completion of the programme, university students would then have access to an online portal in the form of a mobile application or website for ongoing education and support.

A channel would need to be created to engage universities to get them to include the financial literacy programme into their university curriculum. The main channel used for engaging the universities would need to be direct customer relationship managers. This channel is likely to be expensive, but necessary to forge relationships universities to get their buy-in to incorporate financial literacy programmes into university curricula, and to continue demonstrating value to them in future. This is likely to be a long process and likely to prove a major challenge that would need to be considered in further detail.

6.2.4 Customer Relationships

Customer relationships would be personal in the same way as universities currently have relationships with their students. The university online teaching portal for study material and engagement will be used to build relationships with university students. Furthermore, the programme will be delivered in the form of lectures to university students. Thus, a personal relationship can be developed with course facilitators or lecturers.

Given that the engagement following the completion of the programme will be a virtual offering in cyberspace, customer relations are most likely to be automated for communication, engagement and transaction with the online platform. This will also include the registration process on the portal and the App, with ongoing communication mainly through interaction with the App and the website and email.
For the universities, relationships will be personal to directly engage them, initially to convince them to adopt the financial literacy programme into their curricula, and ongoing engagement for feedback on programmes thereafter.

Given that financial literacy programmes are currently not offered by South African universities, all relationships still need to be established. The development of the online portal as well as any other supporting technology (Apps, etc.) is not likely to be very expensive to set up with the initial upfront sunk cost expected to be reasonably recovered from operations within the first year, with minimal ongoing maintenance fees, aside from website maintenance and App updates to ensure relevance with market trends.

On the other hand, the establishment of a network of service consultants to forge direct relationships with universities will be extremely human resource intensive and thus expensive. The main costs would relate to personnel costs (salaries and training).

To mitigate the risk of not securing relationships with universities, the financial literacy programme could be rolled out at universities through adoption of a phased approach to full scale operations, by first piloting the programme at a single university and only expanding to other universities once the pilot initiative is deemed a success.

6.2.5 Revenue streams

The main source of revenue from university students would be in the form of a subsidised course fee. The course fee could be partially subsidised or offered at no cost to university students from a combination of the following revenue sources:

- Donor Funding;
- Sponsorships;
- Government grants;
- Corporate social investment initiatives; and
- Industry Stakeholder funding.
Further revenue streams that may be considered in future once these university students engage with the online portal upon completion of the financial literacy programme:

- Revenue can be generated as an online advertising platform;
- The online portal serving as a gateway to supplying financial products and services to university students and earning remuneration in the form of product commissions; and
- An annual or monthly fee to access the portal.

6.2.6 Key Activities

The main activity to ensure the business model works would be the establishment of relationships with the various universities, and convincing them to incorporate the financial literacy programme into their university curricula. Other relationships would need to be forged with industry stakeholders such as the regulatory bodies and industry bodies and companies operating in the financial services industry. This would be to obtain endorsement of the financial literacy programme, as well as to get their input into the effective delivery mechanisms of the programme, and to test and critique the programme.

Another key activity will be development of the programme, and the ongoing refinement of the programme following the initial roll-out. The initial development will be once off. The ongoing refinement is expected to take place as and when required to keep up with market trends and developments, to ensure that the programme is dynamic and agile to remain relevant.

A monitoring and evaluation framework would also be developed to test the outcomes of the financial literacy programme. Strict performance metrics will be set to ensure that the financial literacy programme overcomes the shortcomings identified of existing programmes.

Other activities include the creation of the online integrated portal (website), development of mobile applications (Apps) to develop the platform for the ongoing
learning and support once university students have completed the financial literacy programme.

6.2.7 Key Resources

The key resources of the business model pertain to Human Resources. These are primarily required to forge relationships with the universities in South Africa. It is envisaged that at least five customer relations and servicing resources would need to be employed to fulfil this function. These would be required to forge relationships with up to twenty five public universities in South Africa (Council on Higher Education, 2017).

A course development and maintenance resource will need to be sourced to develop the financial literacy programme. Additional resources will be required to actually implement the financial literacy programme at universities. These could take the form of lecturers or facilitators, depending on the mode of delivery of the financial literacy programme.

A team of IT personnel may be required to build the online platform initially, although this function may be outsourced at inception.

Other resources include financial resources which would need to be obtained from various sources that would need to be explored, including founders’ capital injection, loans, industry stakeholders and social capitalists, and physical infrastructure such as office space, personal computers and office furniture.

6.2.8 Key partnerships

Key partnerships for this venture would be with the public universities operating in South Africa to provide the gateway to university students to enable roll-out of the financial literacy programme. These would take the form of strategic alliances. Without these partners, getting university students to enrol for a financial literacy programme may prove fruitless.

Universities will aid the venture by fulfilling the following functions of the venture:
• Creation of awareness of the financial literacy programme and compelling university students to undertake the programme as part of their university education;
• The registration process of each student on the programme, and conferring of the relevant certification of the programme; and
• Endorsement of the programme.

Additional partnership will also be required with the industry stakeholders in the financial services industry, including the FSB, FinMark Trust, FPI and financial services providers, including the providers of existing financial literacy programmes. This would be to ensure integration with other initiatives by these stakeholders, and to get the programme endorsed by these stakeholders.

Lastly, there may be a need to partner with student bodies to source ambassadors for the financial literacy programme to encourage students undertaking the programme to actively live the lessons in terms of attitudes and behaviours pertaining to financial matters.

**6.2.9 Cost Structure**

The costs that will be incurred in launching the venture as well as the ongoing operations of the venture include course development, website design, website hosting, mobile applications design, IT security, business continuity and recovery, office space, physical lecture rooms, IT infrastructure, salaries, marketing, and taxes, amongst others. Human resources costs are likely to form the bulk of the cost base of the venture.

A lean cost structure will be pursued given the start-up nature of the venture. Cost sharing with the different universities in terms of university infrastructure to may reduce some of the costs mentioned above.
6.2.10 Conclusion

Investigating the social entrepreneurship venture to develop a financial literacy programme for university students through a business model canvas demonstrates the merits of pursuing this opportunity, given the need identified in earlier sections.

The main challenges pertain to developing partnerships with universities to include such programmes into their teaching curricula.

6.3 Financial Projections for the venture

A detailed financial projection exercise has been conducted to assess the financial viability of the venture. The financial numbers have been calculated for implementing the financial literacy programme at a single university. There are currently 25 public universities in South Africa that generated approximately 191,000 university graduates in 2015 (Council on Higher Education, 2017). For purposes of the financial calculations, it has thus been assumed that an average of 8,000 graduates graduate from each institution every year.

The detailed financial projections appear in Appendix 2.

6.3.1 Realistic scenario

Based on the financial analysis, and upfront capital investment of R 10 million will be required to implement the financial literacy programme for each university. Upfront cost for course development, IT infrastructure development would comprise approximately R 6 million of this amount, with the balance being used as working capital. Of this amount of R 10 million, R 2.5 million seed capital can be injected into the venture by the founder of the venture, with the remaining capital sourced through external capital sources.

The cashflows expected to be generated from the venture are shown for each year in the table below. The illustration includes upfront development and infrastructure sunk costs of R 6 million at inception.
<table>
<thead>
<tr>
<th>Year</th>
<th>Net cashflow</th>
<th>Cumulative Cashflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial cost at inception</td>
<td>(6,000,000)</td>
<td>(6,000,000)</td>
</tr>
<tr>
<td>2018</td>
<td>(3,625,000)</td>
<td>(9,625,000)</td>
</tr>
<tr>
<td>2019</td>
<td>(2,231,250)</td>
<td>(11,856,250)</td>
</tr>
<tr>
<td>2020</td>
<td>836,875.00</td>
<td>(11,019,375.00)</td>
</tr>
<tr>
<td>2021</td>
<td>7,541,562.50</td>
<td>(3,477,812.50)</td>
</tr>
<tr>
<td>2022</td>
<td>7,928,640.63</td>
<td>4,450,828.13</td>
</tr>
<tr>
<td>2023</td>
<td>8,345,072.66</td>
<td>12,795,900.78</td>
</tr>
<tr>
<td>2024</td>
<td>8,748,326.29</td>
<td>21,544,227.07</td>
</tr>
<tr>
<td>2025</td>
<td>9,175,742.60</td>
<td>30,719,969.67</td>
</tr>
<tr>
<td>2026</td>
<td>9,624,529.73</td>
<td>40,344,499.41</td>
</tr>
<tr>
<td>2027</td>
<td>10,091,756.22</td>
<td>50,436,255.63</td>
</tr>
</tbody>
</table>

Table 4 – Cashflow projection

The venture is expected to yield positive cashflows from year three, although the payback period for the initial capital outlay of R 10 million is four years. The project will yield a positive net present value of R 11.4 million over the 10 year period to 2027. The net present value assumes a cost of capital of 15%.

The financial analysis on the best case scenario to introduce the financial literacy programme at the first university is highly viable. It should be noted that sunk cost do not need to be repeated for each university, given that the infrastructure and development for the first university can be used for subsequent universities. In
addition, economies of scale generated from scaling the operation to other universities have not been considered.

The financial analysis assumes that a total fee of R 3,000 per student needs to be generated from the various revenue sources outlined in Section 6.2.5. in year 1 of the operation of the venture. Alternately, a full fee of R 3,000 can be levied on each student to undertake the financial literacy programme.

Other assumptions for the financial analysis has been summarised as follows:

- Initial Capital Outlay – R 10 million.
- Number of students enrolled on the programme in year 1 will total 1,000, increasing to 2,000 in year 2, 4,000 in year 3 and 8000 per year thereafter.
- Operational costs will consist of:
  - Salaries for a University liaison manager, an office administrator, the ventures executive function, IT technician (maintenance, support and development), and university lecturers, resulting in a total salary bill of R 10 million in year 1 of the operation.
  - Other expenses such as rental costs, web hosting services, and costs to refine the programme annually amounting to R 560,000.
  - Fees payable to the university to utilise the university infrastructure to implement the programme (lecture theatres, teaching materials, learning portal, etc.). The fee payable has been costed at R 1,500 per student or R 1.5 million in the first year of the operation.
  - A sundry expense allowance of R 1.2 million in the first year of operation for any unexpected expenses not explicitly considered.

Sensitivities to the financial analysis above is shown in Appendix 2.

### 6.3.2 Alternate Scenario

Under the alternate scenario, the following aspects of the venture can be considered to be delayed to ease the cashflow requirements in the initial years, and to reduce the initial capital required to launch the venture. This scenario would also
include the reduction in the required expenses for the first year of operations for university liaison and the executive functions of the venture, with these functions being undertaken by the founder of the venture.

Based on this scenario, the capital requirement reduces to R 4 million in the first year of operation. This can be funded from a combination of seed capital of R 2.5 million from the founder, with the balance funded as debt from the financing institutions.

Additional funding for development and investment in infrastructure for the ongoing support phase will then only be sourced once the venture is up and running, making it easier to raise additional funding with this phase only required once the venture is up and running. Furthermore, this phase of the venture can leverage the existing university infrastructure, thus reducing the need for the venture to invest in its own infrastructure. This would result in the venture never requiring an additional capital injection following the initial capital outlay.

This alternate scenario will result in the venture having a payback period of four years and generating a positive cashflow from year 2 of the operation. This alternate scenario would result in a net present value of R 17.6 million over the 10 year period to 2027. The net present value assumes a cost of capital of 15%.

It is envisaged that the either realistic scenario or the alternate scenario presented will be pursued to launch the venture.

### 6.4 Strategic Analysis

A strategic analysis has been conducted on the proposed venture based on the business model canvas discussed in Section 6.2 and the financial analysis conducted in Section 6.3. Some of the information contained in the strategic analysis may be a repetition of what has already been discussed in the sections above.
6.4.1 PESTEL Analysis

6.4.1.1 Political Factors

Government policies pertaining to student fees and free education will have a significant impact on the venture, specifically pertaining to the propensity of university students to pay additional fees for the financial literacy course.

The outcome of the Commission of Enquiry into higher education and training as commissioned by the President is likely to impact the venture, although at this stage it is not anticipated to be a detrimental impact. The interim report released in November 2016 was not conclusive on the way forward to address the demands of the #feesmustfall movements (Commission of Enquiry into Higher Education and Training, 2016)

6.4.1.2 Economic Factors

A successful financial literacy programme is likely to result in higher levels of economic stability through higher levels of savings and investments, and having a financially inclusive economy (de Beer & Coetzee, 2003) and sustainable economic growth (Rafera et al., 2016).

South Africa currently has low levels of The Gross Domestic Product (GDP) growth with growth totalling 0.3% only for 2016, with the outlook for 2017 also being poor (Statistics South Africa, 2017). The economic environment will exacerbate poor attitudes and behaviours pertaining to financial matters as established from the qualitative research conducted, further increasing the requirement for financial literacy initiatives and the launch of this venture.

6.4.1.3 Social Factors

Social factors identified in South Africa include the concepts of the Sandwich Generation, Black Tax and the impact of generational aspects given that households in South Africa usually consists of extended families.
The emergence of the black middle class in South Africa following the end of Apartheid and the cultural aspects of consumption and instant gratification means that the social needs of financial literacy initiatives such as this venture are required in the current social context.

6.4.1.4 Technological Factor

New digital teaching methods such as online courses as well as real time access to information has changed the delivery of information to populations at large. The financial literacy programme aims to leverage these technological advancements to further increase the likelihood of success of the venture.

6.4.1.5 Legal factors

Currently, no legal authority in South Africa legislates financial literacy programmes. Thus, legislation will not be a hurdle to the venture. Legislative changes may thus pose a potential risk to the venture in the future.

6.4.1.6 Environmental Factors

The venture will have no impact on the environment at all and this factor is not considered further.

6.4.2 SWOT Analysis

The financial analysis indicates that the venture is financially feasible, whilst the business model canvas indicates the merits of the venture. A SWOT analysis for the venture is tabled below.
Table 5 – SWOT analysis

The mitigation strategy for each weakness and threat identified in the SWOT analysis has been summarised as follows:

### 6.4.2.1 Weaknesses

Development of the course is unlikely to be a major hurdle given that templates currently exist through the FinMark Trust (Genesis Analytics, 2013). Furthermore, all development will be undertaken prior to launch of the venture.

The venture will not be launched until at least one university has agreed to adopt the financial literacy programme or until such time that the programme has been tested through a pilot study. The founder currently has established client relationships with the two universities, and has the opportunity to receive
introductions to at least three other universities in South Africa through existing relationships within his network.

To overcome the weakness of having to train resources, the programme will initially be conducted by the Founder who has extensive financial knowledge. The founder will undertake an education module to overcome the lack of his education background.

### 6.4.2.2 Threats

The venture will be structured in a manner that enables it to be dynamic and agile, thus ensuring that it can quickly respond to changes in legislation and changes to the environment. Furthermore, by being the first independent entrant to the market to provide a financial literacy programme to this target segment. The threat of competition can be easily dealt with, especially given that a university is unlikely to engage multiple providers for the same service, with the venture being entrenched at universities through relationships developed through ongoing liaisons with universities.

The alternate financial scenario presented together with the Founder’s seed capital enables the venture to initially operate without the need to raise substantial external funding. Funding constraints are also likely to be the key hurdle for universities to pursue the initiative on their own, coupled with the lack of expertise that has prevented them offering this course as part of university curricula in the first place.

Lastly, obtaining industry endorsement for the venture is unlikely to prove difficult if the merits of success of the venture can be suitably demonstrated in light of the failings of current programmes identified as part of the research in Section 5.

### 6.5 Conclusion

The Business model canvas and the financial analysis indicates that the venture will be viable. This venture will also fill a gap in the current market, whilst achieving a social benefit of improving financial literacy levels of a segment of the population
in South Africa, thus encouraging positive attitudes and behaviours which would ultimately lead to better financial outcomes.

The strategic analysis further entrenches the merits of launching the venture, with the strengths and opportunities identified surpassing the weaknesses and threats identified, with a mitigation strategy for the weaknesses and threats being documented.

7 Conclusion and Recommendation

7.1 Purpose of the Study

This social entrepreneurship venture proposal aims to address the low levels of Financial Literacy in South Africa, with a specific focus on university students in their final year of study. The venture would take the form of a financial literacy education programme.

7.2 Literature review

The conclusions drawn from the literature review are documented in Section 3.2.9. These can be summarised as follows:

- No formalised definition of financial literacy exists in South Africa.
- Individuals primarily obtain a level of financial literacy when they start using financial products as they enter the workforce, at which point it may be too late.
- Financial literacy is a huge problem in South Africa. The main solution to address this has been identified as introducing intervention measures as early as possible in one’s lifetime, possibly incorporating these interventions into the education curricula.
- The current programmes available are failing miserably.
7.3 Research Methodology

The research methodology applied is a mixed methodology to inform the financial literacy venture. A quantitative methodology is applied to the problem of financial literacy. This has been based on secondary data obtained from the FinMark Trust. A qualitative methodology has also been applied to the problem of the failings of existing financial literacy programmes, with information gathered through face to face interviews conducted with industry stakeholders.

7.4 Research Results

7.4.1 Quantitative Results

The quantitative research conducted based on secondary data obtained from the FinMark Trust as part of the FinScope surveys conducted has reinforced the findings of the FinScope surveys that financial literacy levels are poor (Roberts et al., 2016), even for university students and university graduates. Note that the FinMark Trust is not liable for the analysis or interpretations of the data provided as part of the quantitative research conducted.

The results are summarised as follows:

- University students use financial products less extensively when compared to university graduates, although the level of knowledge of financial products do not differ extensively between the two groups.
- Attitudes between the two groups are not dissimilar, although graduates exhibited more positive attitudes.
- Behaviours between the two groups differed substantially.
- University graduate exhibit low relative levels of financial literacy, although these are in line with the levels of financial literacy reported in the FinMark Trust FinScope surveys.
• University students exhibited extremely low levels of financial literacy making them the ideal target for intervention measures, and hence for this venture which is proposed to take the form of a financial literacy programme.

7.4.2 Qualitative results

The common themes emerging from the qualitative study is summarised as follows:

• Most individuals are not aware of financial literacy programmes or where to access them, with a perception that they are costly to access. There is a proliferation of programmes focused on those in formal employment, yet these programmes are disjointed with no co-ordination between them. It is education in general that is an issue rather than financial literacy in particular.

• Knowledge, attitudes and behaviours are a function of the economic climate, and due to other external factors such as household behaviours, lack of knowledge of the consequences of particular actions, individual circumstances, the current culture of consumption and instant gratification, and the conscious choice made by individuals irrespective of knowledge. A lack of role models exhibiting the correct attitudes and behaviours was also cited as a reason for poor attitudes and behaviours.

• Financial literacy programmes happen too late in an individual’s life cycle, and such interventions were typically static and once off initiatives offering no ongoing education and support. Programmes were also too generic not meeting the specific needs of the target audiences, specifically not considering generational aspects.

• Some reasons for the shortcomings of existing programmes include:
  o The lack of co-ordination of programmes, and hence lack of accurate measurement of outcomes of these programmes;
  o The lack of ongoing engagement, education and support;
  o Education only focusing on products that are available;
  o The grey area between education and marketing;
  o Lack of formal acknowledgement of competence;
  o Lack of authenticity of programmes; and
• Incorrect personnel delivering such programmes.

• Policymakers could play a larger role in influencing financial literacy levels and financial outcomes, in particular providing instruction on the inclusion of financial literacy programmes in education curricula.

• South Africa’s unique situation in terms of socio economic, political and educational level exacerbates the problem of financial literacy when compared to other countries in the world, specifically developed countries.

• Programmes can be improved by the following mechanisms:
  o Introducing tangible incentives to change attitudes and behaviours;
  o Conducting of programmes in the mother tongue of individuals;
  o Addressing the conflicts of interest that exist between product providers and those who provide financial literacy programmes. Often, these are one and the same;
  o Contributing towards longitudinal studies to track outcomes and behaviours over time; and
  o Embracing the advancement of digital technologies.

7.5 Business Plan for financial literacy programme for university students

The business plan is provided in the form of a business model canvas, augmented by a financial analysis for one university and a strategic analysis of the entire venture.

The conclusion from these analyses is that there is merit in implementing the venture, which has also been modelled to be financially viable. The potential exist to scale this venture to all universities in South Africa, as well as to other target segments of the population.

7.6 Recommendations for further research

The key recommendation for additional research pertains to longitudinal studies. Studies on financial literacy are quite recent, with most studies being conducted in
the last decade. Thus, there exist extensive scope for conducting research in this area in the future.
**Appendix 1 – Financial Literacy scoring matrix**

Financial literacy scores per response to each question of the FinScope surveys considered in this analysis has been allocated as per the matrix below:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Response</th>
<th>Score Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have a bank account in your own name</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>You don't understand how a bank account works</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>You don't know how to open a bank account</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>You withdraw all funds as cash as soon as it is deposited in your bank account</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>You currently borrow from:</td>
<td>Borrowing form a bank</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Friends/family</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-bank formal</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Not borrowing</td>
<td>1</td>
</tr>
<tr>
<td>You don't know how to get debt</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>You don't know how loans work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are currently insured with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You currently save as follows:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You have enough money for saving after covering all your spending needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Informal</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Not insured</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other formal</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Do not save</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Keep money or save at home</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Save at the banking institution</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Saving at non-bank formal institution</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Savings at informal groups</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Don't Know</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>You are worried that you will not have enough money for retirement</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>dealing with personal finances is stressful</td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>You find the language used in financial paperwork confusing</td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>You have written up a plan or budget of your spending and earnings to make sure they balance</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>You keep track of money that you get and spend</td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>You have heard of ombudsman</td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Since you started using financial services, you feel much more in control of your financial situation</td>
<td>1 - Completely disagree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>You think that financial institutions are generally difficult to deal with</td>
<td>5 - Completely agree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>You carefully considered financial products to use for your situation</td>
<td>1 - Completely disagree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>You generally find it difficult to get good information about financial products</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 - Completely disagree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>In your household, you are satisfied with the financial products and services that you use</td>
<td>1 - Completely disagree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>You always keep an eye out for better products and services than you currently have</td>
<td>1 - Completely disagree</td>
<td>0</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>The financial institutions you use regularly keep you up to date with</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>new products and services to consider</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>You find it stressful to switch between financial products</td>
<td>1 - Completely disagree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>You would rather not change your financial products even though you know it would be better to do so</td>
<td>1 - Completely disagree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Financial security is very important to you</td>
<td>1 - Completely disagree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>4</td>
</tr>
<tr>
<td>Criteria</td>
<td>Response</td>
<td>Score Allocated</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>If you really want something, you will buy it on credit rather than wait</td>
<td>Don't Know</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 - Completely disagree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5 - Completely agree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>0</td>
</tr>
</tbody>
</table>
Appendix 2 Financial Projections

The detailed income statement as well as the sensitivity on the best case, worst case and the realistic scenarios are shown below. These serve as sensitivities to the realistic scenario. All values are increased by inflation each year at an assumed inflation rate of 5.5% per annum.

| Detailed Cashflow statement - Realistic Scenario | 2018     | 2019     | 2020     | 2021     | 2022     | 2023     | 2024     | 2025     | 2026     | 2027     |
| Year                                                                 |          |          |          |          |          |          |          |          |          |          |
| Number of students                                                   1,000    2,000    4,000    8,000    8,000    8,000    8,000    8,000    8,000    8,000   |
| Revenue                                                             3,000,000 6,300,000 13,240,000 27,800,000 29,200,000 30,680,000 32,200,000 33,800,000 35,480,000 37,240,000 |
| Expenses                                                             6,625,000 8,531,250 12,403,125 20,258,438 21,271,359 22,334,927 24,624,257 25,855,470 27,148,244 |
| Executive office (CEO, CFO, etc) of venture                          2,000,000 2,100,000 2,205,000 2,315,250 2,431,013 2,552,563 2,680,191 2,814,201 2,954,911 3,102,656 |
| Customer Relationshio Manager Salary                                 500,000   525,000   551,250   578,813   607,753   638,141   670,048   703,550   738,728   775,644 |
| IT Technician salary                                                 500,000   525,000   551,250   578,813   607,753   638,141   670,048   703,550   738,728   775,644 |
| Lecturers salary                                                     125,000   131,250   136,300   138,915   145,861   153,154   160,811   168,852   177,295   186,159 |
| Rent                                                                120,000   126,000   132,300   138,915   145,861   153,154   160,811   168,852   177,295   186,159 |
| Sundry expense                                                       1,200,000 1,260,000 1,323,000 1,389,150 1,458,608 1,531,538 1,608,115 1,688,521 1,772,947 1,861,594 |
| University infrastructure fee                                       1,500,000 3,150,000 6,615,000 13,891,500 14,586,075 15,315,379 16,081,148 16,885,205 17,729,465 18,615,939 |
| Annual refinement to courses                                        200,000   210,000   220,500   231,525   243,101   255,256   268,019   281,420   295,491   310,266 |
| Net cashflow                                                         (3,625,000) (2,231,250) 836,875   7,541,563   7,928,641   8,345,073   8,748,326   9,175,743  9,624,530  10,091,756 |

The realistic scenario is detailed in Section 6.3.1
The best case scenario is shown below. The main assumption of the best case scenario is that implementation is to all 8,000 students from year 1 of operation of the venture.

### Detailed Cashflow statement - Best Case Scenario

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of students</strong></td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>24,000,000</td>
<td>25,200,000</td>
<td>26,480,000</td>
<td>27,800,000</td>
<td>29,200,000</td>
<td>30,680,000</td>
<td>32,200,000</td>
<td>33,800,000</td>
<td>35,480,000</td>
<td>37,240,000</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>18,000,000</td>
<td>18,375,000</td>
<td>19,293,750</td>
<td>20,258,438</td>
<td>21,271,359</td>
<td>22,334,927</td>
<td>23,451,674</td>
<td>24,624,257</td>
<td>25,855,470</td>
<td>27,148,244</td>
</tr>
<tr>
<td>Executive office (CEO, CFO, etc) of venture</td>
<td>2,000,000</td>
<td>2,100,000</td>
<td>2,205,000</td>
<td>2,315,250</td>
<td>2,431,013</td>
<td>2,552,563</td>
<td>2,680,191</td>
<td>2,814,201</td>
<td>2,954,911</td>
<td>3,102,656</td>
</tr>
<tr>
<td>Customer Relationshiop Manager Salary</td>
<td>500,000</td>
<td>525,000</td>
<td>551,250</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>IT Technician salary</td>
<td>500,000</td>
<td>525,000</td>
<td>551,250</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>Lecturers salary</td>
<td>1,000,000</td>
<td>525,000</td>
<td>551,250</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>Rent</td>
<td>120,000</td>
<td>126,000</td>
<td>132,300</td>
<td>138,915</td>
<td>145,861</td>
<td>153,154</td>
<td>160,852</td>
<td>168,852</td>
<td>177,295</td>
<td>186,159</td>
</tr>
<tr>
<td>Sundry expense</td>
<td>1,200,000</td>
<td>1,260,000</td>
<td>1,323,000</td>
<td>1,389,150</td>
<td>1,458,608</td>
<td>1,531,538</td>
<td>1,608,115</td>
<td>1,688,521</td>
<td>1,772,947</td>
<td>1,861,594</td>
</tr>
<tr>
<td>University infrastructure fee</td>
<td>12,000,000</td>
<td>12,600,000</td>
<td>13,230,000</td>
<td>13,891,500</td>
<td>14,586,075</td>
<td>15,315,379</td>
<td>16,081,148</td>
<td>16,885,205</td>
<td>17,729,465</td>
<td>18,615,939</td>
</tr>
<tr>
<td>Annual refinement to courses</td>
<td>200,000</td>
<td>210,000</td>
<td>220,500</td>
<td>231,525</td>
<td>243,101</td>
<td>255,256</td>
<td>268,019</td>
<td>281,420</td>
<td>295,491</td>
<td>310,266</td>
</tr>
<tr>
<td><strong>Net cashflow</strong></td>
<td>6,000,000</td>
<td>6,825,000</td>
<td>7,186,250</td>
<td>7,541,563</td>
<td>7,928,641</td>
<td>8,345,073</td>
<td>8,748,326</td>
<td>9,175,743</td>
<td>9,624,530</td>
<td>10,091,756</td>
</tr>
</tbody>
</table>

Under the best case scenario, the venture breaks even in year 1 generating sufficient surplus to cover the initial upfront costs of R 6 million. This scenario is cashflow positive from day one, and has a net present value of R28.2 million for the 10 year period to 2027 at cost of capital of 15%.
The worst case scenario assumes that the fees generated by the venture are 33% lower than the realistic scenario, i.e. revenue of only R 2,000 per student is generated in the first year of operation.

### Detailed Cashflow statement - Worst Case Scenario

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>1,000</td>
<td>2,000</td>
<td>4,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>2,000,000</td>
<td>4,200,000</td>
<td>8,820,000</td>
<td>18,520,000</td>
<td>19,440,000</td>
<td>20,400,000</td>
<td>21,440,000</td>
<td>22,520,000</td>
<td>23,640,000</td>
<td>24,840,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>6,625,000</td>
<td>8,531,250</td>
<td>12,403,125</td>
<td>20,258,438</td>
<td>21,271,359</td>
<td>22,334,927</td>
<td>23,451,674</td>
<td>24,624,257</td>
<td>25,855,470</td>
<td>27,148,244</td>
</tr>
<tr>
<td>Executive office (CEO, CFO, etc) of venture</td>
<td>2,000,000</td>
<td>2,100,000</td>
<td>2,205,000</td>
<td>2,315,250</td>
<td>2,431,013</td>
<td>2,552,563</td>
<td>2,680,191</td>
<td>2,814,201</td>
<td>2,954,911</td>
<td>3,102,656</td>
</tr>
<tr>
<td>Customer Relationshio Manager Salary</td>
<td>500,000</td>
<td>525,000</td>
<td>551,250</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>IT Technician salary</td>
<td>500,000</td>
<td>525,000</td>
<td>551,250</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>Lecturers salary</td>
<td>125,000</td>
<td>131,250</td>
<td>275,625</td>
<td>578,813</td>
<td>607,753</td>
<td>638,141</td>
<td>670,048</td>
<td>703,550</td>
<td>738,728</td>
<td>775,664</td>
</tr>
<tr>
<td>Rent</td>
<td>120,000</td>
<td>126,000</td>
<td>132,300</td>
<td>138,915</td>
<td>145,861</td>
<td>153,154</td>
<td>160,811</td>
<td>168,852</td>
<td>177,295</td>
<td>186,159</td>
</tr>
<tr>
<td>Sundry expense</td>
<td>1,200,000</td>
<td>1,260,000</td>
<td>1,323,000</td>
<td>1,389,150</td>
<td>1,458,608</td>
<td>1,531,538</td>
<td>1,608,115</td>
<td>1,688,521</td>
<td>1,772,947</td>
<td>1,861,594</td>
</tr>
<tr>
<td>University infrastructure fee</td>
<td>1,500,000</td>
<td>3,150,000</td>
<td>6,615,000</td>
<td>13,891,500</td>
<td>14,586,075</td>
<td>15,315,379</td>
<td>16,081,148</td>
<td>16,885,205</td>
<td>17,729,465</td>
<td>18,615,939</td>
</tr>
<tr>
<td>Annual refinement to courses</td>
<td>200,000</td>
<td>210,000</td>
<td>220,500</td>
<td>231,525</td>
<td>243,101</td>
<td>255,256</td>
<td>268,019</td>
<td>281,420</td>
<td>295,491</td>
<td>310,266</td>
</tr>
<tr>
<td>Net cashflow</td>
<td>(4,625,000)</td>
<td>(4,331,250)</td>
<td>(3,583,125)</td>
<td>(1,738,438)</td>
<td>(1,831,359)</td>
<td>(1,934,927)</td>
<td>(2,011,674)</td>
<td>(2,104,257)</td>
<td>(2,215,470)</td>
<td>(2,308,244)</td>
</tr>
</tbody>
</table>

Under this scenario, the venture is never financially viable. The key mitigating factor to this scenario is to ensure that the revenue generated per student exceeds the value of R 2,500 per student which would result in a positive net present value of the venture at a cost of capital of 15%.
REFERENCES


