

**Gordon Institute  
of Business Science**  
University of Pretoria

**Business model innovation for residential property  
developers in Gauteng**

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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## **Abstract**

Companies constantly change their business models and invest in innovative techniques to increase their market share. Gauteng, as the economic hub of South Africa, struggles with an increasing housing shortage and an increasing population. Residential property developers deal with a sophisticated and diverse housing market. This study investigates business model innovation for residential property developers in Gauteng, determining how they can increase their competitive advantage.

Literature explains that financial institutions play a significant role in the success of residential property developers' businesses. The literature on sustainability and innovation covers business models in general. However, it does not cover how residential property developers implement these concepts in their business models. Consideration is also not given to South Africa as a developing country.

Therefore, this study aims to understand innovation in the business models of residential property developers and the challenges faced. For this qualitative study, ten semi-structured interviews were conducted with residential property developers in Gauteng.

The results of this study indicated that residential property developers prefer closed innovation processes and advances in technology supported these findings. The findings also discovered the value-adding factors applicable for sustainable residential development. A value-adding factor framework was developed to assist residential property developers to manage more profitable and sustainable businesses.

## **Keywords**

Business models, business model innovation, diversity, innovation, residential property developers, sustainability.

## **Declaration**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Name: Derik Cronjé

Signature:

Date: 06 November 2017

## **TABLE OF CONTENTS**

<b>Abstract</b> .....	ii
<b>Keywords</b> .....	iii
<b>Declaration</b> .....	iv
<b>TABLE OF CONTENTS</b> .....	v
<b>LIST OF FIGURES</b> .....	ix
<b>LIST OF TABLES</b> .....	x
<b>LIST OF APPENDICES</b> .....	xi
<b>LIST OF ABBREVIATIONS</b> .....	xii
<b>CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM</b> .....	1
<b>1. Research title</b> .....	1
<b>1.1 Definition of the problem and purpose</b> .....	1
<b>1.2 Context of the study</b> .....	2
<b>1.3 Significance of the study</b> .....	4
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	6
<b>2.1 Introduction</b> .....	6
<b>2.2 Taxonomy of Literature Review</b> .....	6
<b>2.3 Property Developers</b> .....	8
<b>2.4 Residential Property Developers</b> .....	11
<b>2.4.1 Sustainable city models</b> .....	12
<b>2.4.2 Residential business models</b> .....	14
<b>2.5 Business models</b> .....	14
<b>2.5.1 Definition</b> .....	14
<b>2.5.2 Business model canvas</b> .....	15
<b>2.5.3 Business model components</b> .....	16
<b>2.6 Innovation</b> .....	19
<b>2.6.1 Sustaining innovation</b> .....	20
<b>2.6.2 Commercial innovation</b> .....	20
<b>2.6.3 Transformational-sustaining innovation</b> .....	20
<b>2.6.4 Disruptive innovation</b> .....	20
<b>2.6.5 Open innovation</b> .....	21
<b>2.7 Business model innovation</b> .....	22
<b>2.8 Conclusion</b> .....	27

<b>CHAPTER 3: RESEARCH QUESTIONS</b> .....	28
<b>3.1 Introduction</b> .....	28
<b>3.2 What role do financial institutions play in the success of residential property developers' businesses?</b> .....	28
<b>3.3 How has the concept of sustainability influenced the formulation of residential property developers' business models?</b> .....	28
<b>3.4 How do residential property developers innovate their business models?</b> ...	29
<b>3.5 What influence does closed innovation, as opposed to open innovation, have on residential property developers' business models?</b> .....	29
<b>3.6 How does the triple bottom line affect residential property developers' business models?</b> .....	30
<b>CHAPTER 4: RESEARCH METHODOLOGY</b> .....	31
<b>4.1 Introduction</b> .....	31
<b>4.2 Research method and design</b> .....	31
<b>4.3 Population and sampling frame</b> .....	31
<b>4.4 Sampling</b> .....	32
<b>4.5 Unit of Analysis</b> .....	33
<b>4.6 Data collection method</b> .....	33
<b>4.6.1 Introduction</b> .....	33
<b>4.6.2 Interview schedule</b> .....	33
<b>4.6.3 Pilot interview</b> .....	34
<b>4.6.4 The interviews</b> .....	34
<b>4.7 Interview transcription</b> .....	35
<b>4.8 Coding and analysis in Atlas.ti 8</b> .....	36
<b>4.9 Quality, reliability and validity</b> .....	37
<b>4.10 Assumptions and research limitations</b> .....	38
<b>4.11 Ethical considerations</b> .....	39
<b>4.12 Conclusion</b> .....	40
<b>CHAPTER 5: RESULTS</b> .....	41
<b>5.1 Introduction</b> .....	41
<b>5.2 Description of the participants</b> .....	41
<b>5.3 Results</b> .....	45
<b>5.3.1 RESEARCH QUESTION 1</b> .....	45
<b>5.3.2 RESEARCH QUESTION 2</b> .....	52
<b>5.3.3 RESEARCH QUESTION 3</b> .....	59
<b>5.3.4 RESEARCH QUESTION 4</b> .....	72
<b>5.3.5 RESEARCH QUESTION 5</b> .....	85

<b>CHAPTER 6: DISCUSSION OF RESULTS .....</b>	<b>94</b>
<b>6.1 Introduction.....</b>	<b>94</b>
<b>6.2 RESEARCH QUESTION 1 .....</b>	<b>95</b>
<b>6.2.1 Change in the markets .....</b>	<b>95</b>
<b>6.2.2 Change in the business model .....</b>	<b>96</b>
<b>6.2.3 Conclusion of results .....</b>	<b>96</b>
<b>6.3 RESEARCH QUESTION 2 .....</b>	<b>98</b>
<b>6.3.1 Sustainability within the company .....</b>	<b>98</b>
<b>6.3.2 Sustainability within projects.....</b>	<b>100</b>
<b>6.3.3 Conclusion of results .....</b>	<b>101</b>
<b>6.4 RESEARCH QUESTION 3 .....</b>	<b>102</b>
<b>6.4.1 Construction innovations.....</b>	<b>103</b>
<b>6.4.2 Other innovations .....</b>	<b>105</b>
<b>6.4.3 Conclusion of results .....</b>	<b>106</b>
<b>6.5 RESEARCH QUESTION 4 .....</b>	<b>107</b>
<b>6.5.1 The influence of closed innovation on the business model .....</b>	<b>107</b>
<b>6.5.2 The influence of open innovation on the business model.....</b>	<b>108</b>
<b>6.5.3 Conclusion of results .....</b>	<b>109</b>
<b>6.6 RESEARCH QUESTION 5 .....</b>	<b>110</b>
<b>6.6.1 Customer relationships.....</b>	<b>110</b>
<b>6.6.2 Value proposition.....</b>	<b>111</b>
<b>6.6.3 Conclusion of results .....</b>	<b>112</b>
<b>CHAPTER 7: CONCLUSION.....</b>	<b>113</b>
<b>7.1 Introduction.....</b>	<b>113</b>
<b>7.2 Principal findings.....</b>	<b>113</b>
<b>7.2.1 Financial institutions are the key partners in residential property             developers' success.....</b>	<b>114</b>
<b>7.2.2 Residential property developers regard sustainability as vital to their             business' survival.....</b>	<b>115</b>
<b>7.2.3 Innovations for residential property developers mostly occur within             products and processes.....</b>	<b>116</b>
<b>7.2.4 Residential property developers strive towards closed innovation             processes.....</b>	<b>117</b>
<b>7.2.5 Residential property developers address the triple bottom line through             the creation of lifestyle estates.....</b>	<b>118</b>
<b>7.2.6 Conclusion .....</b>	<b>118</b>
<b>7.3 Recommendations for management .....</b>	<b>119</b>

<b>7.4</b>	<b>Limitations of the study</b> .....	120
<b>7.5</b>	<b>Suggestions for future research</b> .....	120
<b>7.6</b>	<b>Summary</b> .....	121
<b>REFERENCES</b>	.....	122



## **LIST OF FIGURES**

Figure 1: Taxonomy of literature review .....	7
Figure 2: Relationships among eco-design, environmental cooperation and performance ..	10
Figure 3: The business model canvas .....	16
Figure 4: Sustainable value for the triple bottom line .....	23
Figure 5: Additional innovation potential through business model innovation .....	24
Figure 6: The magic triangle for business model innovation .....	25
Figure 7: Important areas of the research on business models .....	27
Figure 8: Taxonomy of research question 1 .....	45
Figure 9: Taxonomy of research question 2 .....	53
Figure 10: Key activities for residential property developers .....	55
Figure 11: Taxonomy of research question 3 .....	60
Figure 12: Construction innovations .....	64
Figure 13: More innovations .....	69
Figure 14: Taxonomy of research question 4 .....	72
Figure 15: The various competitive advantages identified .....	73
Figure 16: Taxonomy of research question 5 .....	85
Figure 17: The influences on the residential property market .....	97
Figure 18: Key activities for residential property developers .....	99
Figure 19: Value-adding factor framework for sustainability .....	102
Figure 20: Residential market trends .....	103
Figure 21: The influences on the residential property market .....	115
Figure 22: Value-adding factor framework for sustainability .....	119

## **LIST OF TABLES**

Table 1: Description of Participants.....	42
Table 2: Barriers to entry.....	48
Table 3: Age of all the companies .....	60
Table 4: Current market conditions .....	61
Table 5: Residential market trends.....	62

## **LIST OF APPENDICES**

Appendix 1: Letter of consent and semi-structured interview schedule .....	129
Appendix 2: Atlas.ti list of codes.....	134
Appendix 3: Gibbs ethical clearance confirmation .....	140

## **LIST OF ABBREVIATIONS**

BRT	=	Bus rapid transport
CBD	=	Central business district
GDP	=	Gross domestic product
RPD	=	Residential property developer
RPDs	=	Residential property developers
RPD's	=	Residential property developer's
RPDs'	=	Residential property developers'

## **CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM**

### **1. Research title**

Business model innovation for residential property developers in Gauteng.

#### **1.1 Definition of the problem and purpose**

The South African Constitution states that all South Africans must have access to adequate housing as a basic human right (Matsepane & Zikhona, 2014) and this is an imperative within our urbanised age (Gunter, 2013; Marais & Cloete, 2015; Marais & Cloete, 2017; Wertman, 2015). It further states that no one may be evicted from their homes without a court order (Matsepane & Zikhona, 2014). However, what if the citizens do not even have the luxury of living in a house? What if they do not have basic services like running water or sewerage? South Africa has a large housing backlog (Wertman, 2015) and service delivery protests in South Africa have risen from 13 protests in 2004 to 287 in 2013 (Matsepane & Zikhona, 2014). While there are areas in South Africa where the housing and service delivery is completely absent, there are also areas where affordable housing has been built. However, low-income households struggle to obtain the finance to buy and live in these houses. This begs the question of how South Africa's economic structural system serves our low-income households (Gunter, 2013; Matsepane & Zikhona, 2014). Gunter (2013) argues that this is mostly an economic and policy issue. Marais and Cloete (2015) say that there is a direct link between the global financial crises and the housing finance in South Africa. The financial institutions have subsequently lost confidence in the residential markets, since the global financial crises occurred in 2007 and 2008 (Gaffney, 2015).

Approximately 21 schemes and programmes have been implemented to address the housing crises in South Africa ranging from the "Social Housing and Regulatory Authority" to the "National Home-Builders Registration Council (NHBRC)", yet the housing backlog in South Africa seems to be increasing as the population grows (Matsepane & Zikhona, 2014). Gauteng and the Western Cape are the two provinces that have experienced the largest population growth in South Africa and they are also experiencing the largest problems with regards to available housing, access to developable land and land ownership (Matsepane & Zikhona, 2014). Most of the developable land is on the outskirts of the cities, where no services and public infrastructure are available (Gunter, 2013). There are ever-rising issues in South Africa, including "housing, education, health, security and social" to relocate its citizens within a mix of services and infrastructure (Matsepane & Zikhona, 2014, p.4).

Through the provision of housing to the majority of South African citizens will not only give them their basic human right, but it will also give them the opportunity for social and political integration (Gunter, 2013). However, where does the innovation lie that will change the way financial institutions do business, facilitating easier financing for home ownership? There have been various factors such as interest rates soaring to 20% in the 1980's, that made financial institutions risk averse and lose confidence in lending money to potential home buyers (Marais & Cloete, 2015; Marais & Cloete, 2017). The authors mention a number of problems between the financial institutions and their strict lending policies, which include "housing finance logjams at the lower end of the market, the appropriateness of mortgage finance, the conflict between housing finance institutions, historical and current problems with extending private sector finance to lower income black households, mortgage defaulting, and the performance of housing loans at the lower end of the market" (Marais & Cloete, 2017, p.23).

According to Theurillat, Rerat, and Crevoisier (2014), there is an increasing emphasis placed on the links between real estate, land value, town planning and the financial system. The basic understanding in the real estate market is that property developers calculate the difference between the cost of production and the market price, which gives them a profit margin (Theurillat et al., 2014). However, during an economic downturn, profits from residential developments are low and the relationships between developers and financial institutions become increasingly important. This is because the difficulty in property development lies in the acquisition of sites and this requires a large financial investment (Bryson & Lombardi, 2009). It seems like financial institutions might play an irreplaceable role as partners in success during the formulation and execution of a RPD's business model.

The housing backlog in South Africa drives the need for housing, which means there is a sufficient market for residential property developers (RPDs) to thrive in business. However, during difficult economic times when financial institutions are not prone to lending, RPDs require innovation within their business models to stay ahead in the market. One option might be to move away from traditionalist one-product-model and diversify the business model with various products in the market to spread the risk of residential property development.

## **1.2 Context of the study**

South Africa has a unique history shaped by an Apartheid regime, where government controlled urbanisation by restricting black people from moving into the cities. The Apartheid regime had controls in place to govern the people's right to own land; their ability to live where

they desired; as well as regulations that only white people could have access to certain jobs; or educational and training institutions (Turok, 2012). With the fall of the Apartheid regime and the introduction of the new ruling government, the African National Congress (ANC), the housing issue became a reality as everyone moved to the cities for the opportunities they presented. Opportunities such as adequate housing, educational facilities, healthcare and security (Matsepene & Zikhona, 2014; Turok, 2012). The Apartheid era has created a highly fragmented urban structure, where there is still an unequal divide regarding job opportunities, access to amenities and public services (Turok, 2012). As Turok (2012) states, this makes it extremely difficult for property developers to plan and construct new schools, medical facilities and recreational amenities. Public transport facilities have also become an increasing problem with these developments planned mostly on the outskirts of the city.

The evolution of the urban form and urbanisation have become the norm as more people wish to move away from rural areas. Cities have grown to such an extent that they have become metropolises and urbanisation has led to an organised flow of raw materials, energy, commodities, labour and capital (Brenner, 2013). Urban theory has always stressed the concept of agglomeration, which includes the “dense concentration of the population, infrastructure and investment at certain locations on a broader, less densely settled territorial plane” (Brenner, 2013, p.102). Gauteng consists of three metros, known as Johannesburg, Tshwane and Ekurhuleni. Gauteng’s settlement pattern is exceptionally scattered over the entire province, with very little similarities between the three metros (Turok, 2012). Soweto is a large township area situated far from the Johannesburg central business district (CBD), unlike the closer proximity of the large township known as Alexandra (Turok, 2012). Similar to Johannesburg, Pretoria’s large townships, Soshanguve and Mamelodi, are also situated far from the Pretoria CBD and its employment opportunities. There have been some innovations in transport to connect these townships to the city, like the Bus Rapid Transport (BRT) system that is being rolled out over the entire Gauteng province. Subsequently higher residential densities are being allowed and developed around these transportation systems to connect people to places of employment (Turok, 2012). However, what can RPDs do to decrease the housing shortage and improve the liveable environments of citizens, while still building a profitable business?

Even though Gauteng is considered as the “economic powerhouse” of South Africa, the province’s gross domestic product (GDP) grew by a mere 0.8% in 2016, which was still better than the 0.5% growth of the entire country for that year (Omarjee, 2016). The country then experienced a massive economic crises when it was downgraded to junk status in April 2017 (Eyewitness News & Reuters, 2017). It is not easy to conduct business in a country that is

experiencing difficult economic times, not to mention the difficult political environment as well. What can RPDs do during these times, especially when financial institutions are strict on their lending policies?

### **1.3 Significance of the study**

The urban population in developing countries increased from 300 million to three billion people from 1950 to 2015. Therefore, urbanisation increased from 17% to 50% during this time (Jedwab, Christiaensen, & Gindelsky, 2014). These figures alone show the market formed for real estate developers (Jedwab et al., 2014) and it has created a real opportunity for economic investments. Through “sustaining innovation” real estate developers can create a competitive advantage, so a particular innovation does not affect the existing markets and it follows an evolutionary innovative approach as well as incremental improvements (Brown, 2015). These incremental improvements can include lighter and more efficient materials that speed up the construction process and get the residential units to market quicker (Brown, 2015). Schaltegger and Wagner (2011) agree with Brown and state that business is an ever-changing environment that requires sustainable entrepreneurship. However, they believe that sustainable innovation requires an approach towards meeting societal goals while changing market contexts. It seems that there might some relevancy with regards to sustainability and residential development companies’ longevity and future.

To gain a competitive advantage, developers can also look at how they design their units or houses. They could focus on providing affordable units that are cost effective to own, operate and maintain over the long run. It depends on the target market and analysing the local area to see what people are interested in buying (Brown, 2015). Price is the last deciding factor determining whether people are interested in buying a specific developer’s units or houses. All residential developers in a specific region have a certain amount of market share, a percentage sales growth (which they aim to increase year on year) and a specific model they follow to gain the advantage in the market (Schaltegger & Wagner, 2011). Theurillat et al. (2014) support these arguments and emphasise that the real estate market is extremely complex with technical, institutional, financial and socio-cultural aspects to consider before developing a property. The social-, environmental- and economic value, or more commonly known as the triple bottom line, could clearly all form key considerations throughout the entire residential development process. Understanding sustainable business model innovation could lead to improved economic performance (Evans, Vladimirova, Holgado, Van Fossen, Yang, Silva & Barlow, 2016). RPDs could potentially use their existing networks to assist them with their innovation processes and ideas, which involves the consultation of external professionals



for their knowledge on specific projects. RPDs might have to adjust their business models with regards to changing urban trends such as compaction, densification or change in ownership structure from full title to sectional title. These urban trends shape the property market, but how do RPDs shape their business models to account for the change in urban trends and needs? The sustainability of projects could possibly be increased by the proximity to existing public infrastructure like schools, shops, churches and places of work.

It is argued that companies cannot follow approaches of the past and rely on existing business models to survive in the future. They must innovate their business models constantly in order to ensure their long-term competitive success (Gassmann, Frankenberger, & Csik, 2014; Wrigley, Bucolo, & Straker, 2016). Mostly, companies struggle to innovate their business models because they cannot build new capabilities and company leaders become set in their routines, technologies and knowledge, finding it difficult to accept change (Hargadon, 2015). However, during difficult economic times, companies are forced to change their business models to ensure their survival.

This research paper seeks to address the RPDs' business models and determine how each developer innovate their business model to gain a competitive advantage in the Gauteng property market.

The next chapter will be a comprehensive literature review, discussing various theories and trends that have an influence on residential property development as a business. It will also discuss the formulation of business models and the role that innovation plays in their success. After a critical review on the theory, the need for innovation processes on RPDs' business models can be addressed.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

Business model innovation for residential property developers in Gauteng.

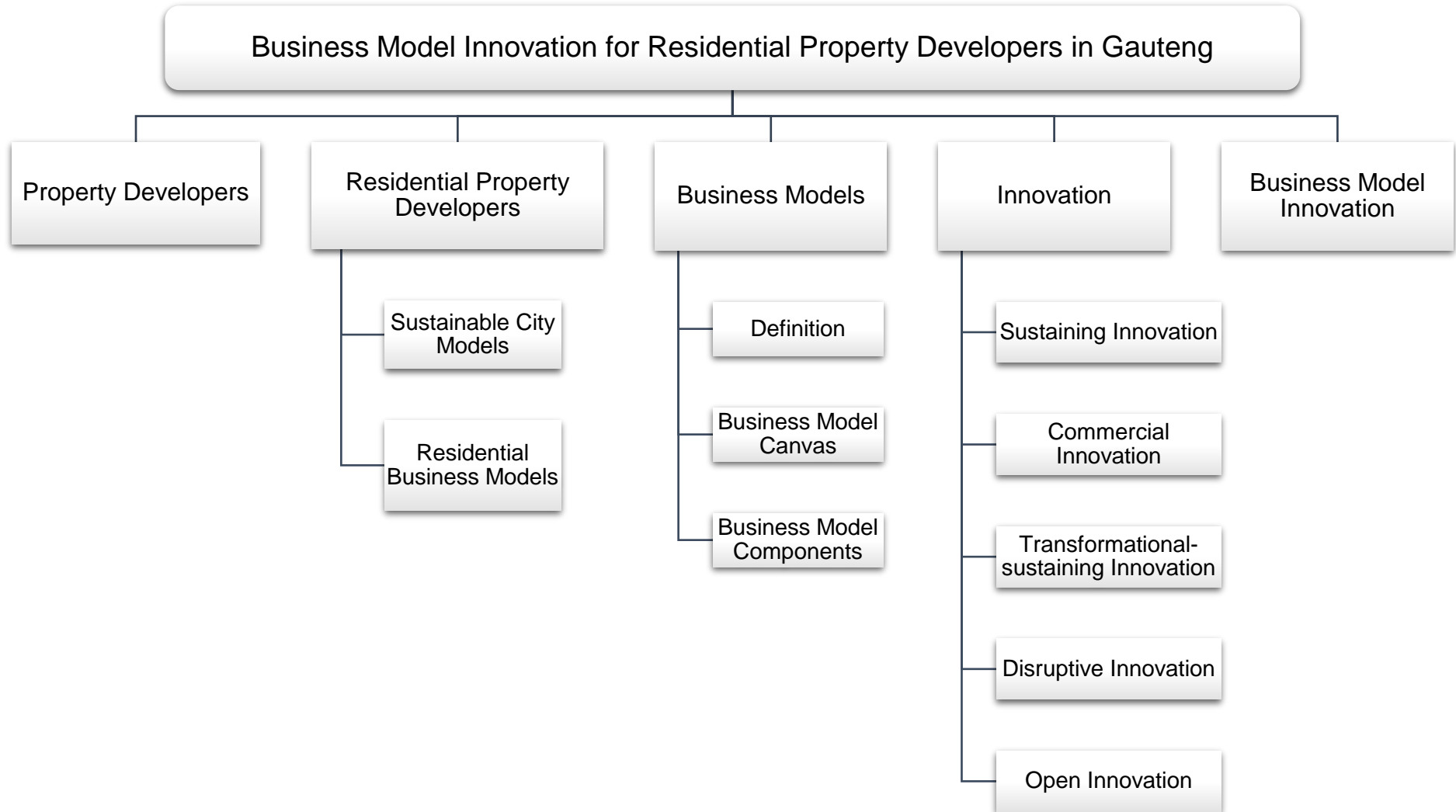
Chapter 1 detailed the issues with regard to the increasing housing shortage and growing population within Gauteng. It addressed the concern that the real estate market is complex and changes regularly, increasing the importance for innovation within residential property developers' business models to gain a competitive advantage.

The following literature review addresses the trend of innovation in the residential property business. It is argued that companies use their resources in innovative ways to gain a competitive advantage within their industries, whether it be with their financial capital, expert capabilities, social capital or the reputation they have built (Halme & Korpela, 2014). The theory and trends of the urban form from a property developer's perspective will be discussed to understand the drive for residential property developers (RPD) to address the need for housing and create a business from this need. The theory will then focus on the methods for RPDs to innovate their business models to stay ahead of their competitors.

### **2.2 Taxonomy of Literature Review**

The literature review flows from property development into the innovation processes and business model concept. Please see the taxonomy diagram below explaining the structure of the literature review.

**Figure 1: Taxonomy of literature review**



### 2.3 Property Developers

The property industry is known for its boom and bust cycles (Gaffney, 2015). Whether investing in industrial, retail, commercial or residential property, investors are always at risk of investing before a bust and losing a significant amount of their investment. Gaffney (2015) explained how these boom and bust cycles can be connected to land prices and the availability of land. He further explained that the change in housing prices is more a change in the price of urban land on which houses are built, since housing stock depreciates over time (Gaffney, 2015). Gaffney (2015) then links the importance of financial institutions to these boom and bust cycles. Bryson and Lombardi (2009) support the importance of financial institutions' role in property development by stating that the difficulty in property development lies in the acquisition of sites, since this requires a large financial investment. During a bust, financial institutions are stricter with lending to investors and interested home owners (Gaffney, 2015; Holgersen, 2014). Only once the cycle starts moving to a boom, do financial institutions gain confidence in the markets again and become more lenient with lending rates. As soon as financial institutions begin lending again and residential construction increases, retail and commercial developers invest in new developments (Gaffney, 2015). The author explained that residential land prices normally increase first, followed by commercial and industrial.

Gaffney (2015) explained that banks are always over-leveraged and property development in itself is a highly leveraged business (You, 2014), with the banks' reserves only contributing a small portion of their loans. The leveraging component of banks makes it possible for them to create large profits during the booms, since the real estate they hold as collateral is increasing in value (You, 2014). However, during the move to a bust period, the real estate's value starts decreasing and everyone with property funded by the bank, tries to discard it at the same time, driving the value down even more (Holgersen, 2014). Eventually, banks end up with low valued assets which they cannot sell and their lending structure becomes very strict (Holgersen, 2014) towards businesses, potential homeowners and investors (Gaffney, 2015). Holgersen (2014) mentioned how some developers changed their business models by developing smaller units or providing less parking, to cut down on development costs and sell units for less, with the hope that more people could obtain loans from the bank.

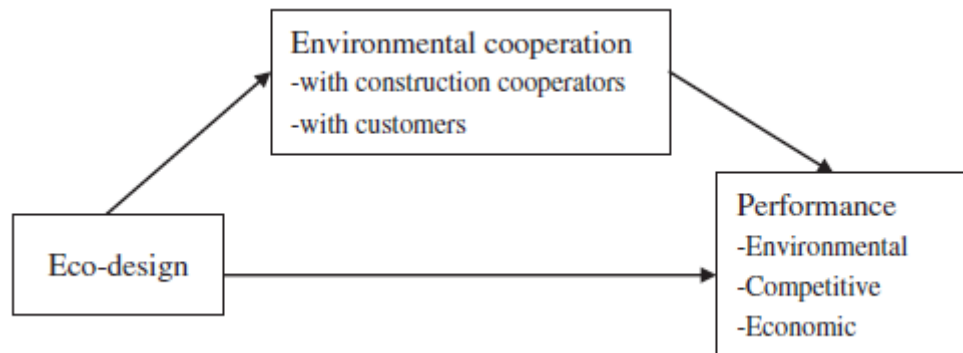
The theory discuss financial institutions in a broad sense and it cannot be differentiated between developed countries and developing countries. South Africa deal with unique issues and financial institutions have to make investment decisions with regard to the context of Gauteng's housing shortage. What influence does financial institutions have on the RPDs' business models in Gauteng?

The concept of sustainability in developments has become more of a consideration, since value and profitability are some of the main factors that drive companies' business models today (Bryson & Lombardi, 2009). The value of a company can be increased by developing cities in a more sustainable way (Bryson & Lombardi, 2009; Krueger & Buckingham, 2012). The authors explained how developers have introduced sustainability in their business models in various stages of the development process; including the design, construction or occupancy stages. Sustainability is still being tested in property developers' business models and their personal views are required to determine what effect this has had. Herbert and Murray (2015) stated how property developers have changed their business models in innovative ways to incorporate various uses (such as corporate, commercial, residential and recreational) within a single development to create more self-sustaining cities. Krueger and Buckingham (2012) supported these statements by mentioning the benefits to infill developments and using existing transport infrastructure and public amenities to create a vibrant new mixed use city.

The sustainability of property developers' business models introduces institutional theory, where property developers have to deal with social pressures that are external to the company. A large part of institutional theory includes the consideration of environmentally-friendly developments and building a positive brand for the development company (Bryson & Lombardi, 2009; Krueger & Buckingham, 2012). Krueger and Buckingham (2012) referred to this as the creative city planning approach. The authors stated that firms can optimise their opportunities and react quickly to changes in the external environment by incorporating it in their business models, gaining a first mover advantage. An environmentally-conscious public and regulatory authorities and governments (Zhu, Zhao, & Geng, 2012), changed the market conditions and presented opportunities to developers to make use of environmentally-friendly products and amend their business models in innovative ways (Bryson & Lombardi, 2009). Property developers have realised the importance of mixed use developments when they develop on large scale, creating dense, compact and sustainable cities. By doing this they are trying to shift the trend of unplanned urban sprawl, since this is reliant on massive transportation infrastructure investment and has a negative impact on the environment (Herbert & Murray, 2015). This seems to gain the interest and support of the general public and potential customers. Bryson and Lombardi (2009) highlighted the advantages of incorporating sustainability in the development process, with a diverse range of building material available for new developments, which could attract tenants and investors that integrate corporate social responsibility in their business strategies. Sustainability could also prolong the value of the development and increase the competitive advantage of a company (Zhu et al., 2012). Below is a sustainability model developed for property developments, with

specific reference to environmental sustainability and gaining interest from the public and customers to increase the value of a business.

**Figure 2: Relationships among eco-design, environmental cooperation and performance**



Source: (Zhu et al., 2012)

The urban form changes with constant advances in technology. Globalisation has left a significant mark on the urban form as cities compete to become global cities and dominant powerful competitors in the global market. It is a continuous race between global cities to gain the latest knowledge, ideas and creativity and to retain global capital to shape their cities into new forms (Goodwin, 2016). The trend has been for rural people to move to urban areas for the financial opportunities that cities have to offer. Discussions around transport have also been a major factor shaping the residential urban form and labour markets (Cumbers, 2014). In South Africa, there were also housing trends adopted due to the Apartheid regime, with specific reference to the German model of gated residential developments (Morange, Folio, Peyroux, & Vivet, 2012). This shaped South African cities, where the rich would not live among the poor, especially in the late 1980's when it was clear that whites would not live with blacks (Morange et al., 2012). After 1994 and the fall of the Apartheid regime, gated residential developments became a trend among the rich, regardless of race. Subsequently, gated residential developments have evolved to include different features and different housing styles, such as individual houses, townhouses and block of flats, as RPDs have innovated their business models to stay ahead of the market (Morange et al., 2012).

With the urban form, the most recent and well known trends have been compaction and densification. Compaction and densification were initiated to curb urban sprawl, since it became too expensive to service the areas on the periphery of the city (Pope & Young, 2015). It also reduced travelling distance for residents in the city with advancing technologies. It has been argued that compaction and densification strategies make cities more sustainable

(Echenique, Hargreaves, Mitchell, & Namdeo, 2012) and RPDs could have amended their business models to develop more high-rise residential developments (Morange et al., 2012). The residential areas are strategically located close to various amenities, which promotes the compact urban form. Since the advent of compaction within cities, Councils have invested more money into public transport systems. Due to the investment in public transport and cities becoming more compact, real estate developers have reduced parking bays within residential developments and focused more on increasing the number of units within developments for a larger profit. This could be seen as a form of innovation in a business model to increase the economic return of the project. There is still the concept of “smart growth”, which entails only compacting areas where advances has been made in the public transportation system. However, the ‘smart growth’ concept has not been followed accurately. RPDs look for investment opportunities in the form of property, then develop and sell an entirely new product in the hope of earning a large entrepreneurial profit (Brown, 2015). When developers have an opportunity to develop more units, it is more than likely they will as it increases the overall feasibility of the project as well as the profit (Charnock, Purcell, & Ribera-Fumaz, 2014). Residential property development remains a business and its aim will be to make a profit, just like any other business. There is still an element of market-led development which occurs in cities. Developers mostly purchase land where they believe the best economic return will be. These are vibrant areas with a high degree of investment, such as new malls, office parks and recreational parks. Therefore, developers will establish infill developments as long as there are investment opportunities available (Echenique et al., 2012).

Schaltegger and Wagner (2011) believed there is a strong correlation between sustainable development and entrepreneurship. The authors argued that taking cognisance of the environmental and social factors in an area, promotes the economic business logic for future projects. It has become a trend to develop more sustainable residential estates.

#### **2.4 Residential Property Developers**

Based on the overview of property development, it is clear that different innovation strategies are necessary to adapt business models to gain a competitive advantage. There are some overlapping areas, such as environmental considerations and the drive towards a sustainable model for the city. Sustainability has become a major factor within property developers’ business models, which is why it will be discussed in more detail with regards to the residential sector.

### **2.4.1 Sustainable city models**

The sustainable city is a concept that has gained momentum over the last ten years. Developers along with their town planners are moving more towards, planning areas and cities with shorter distances. It is all about being close to public amenities and reducing driving distances. The old-fashioned way of planning a city was to have demarcated areas for the residential neighbourhoods on the one side, with the central business district away from them and another demarcated area for retail uses. Now, developers and town planners have moved away from the older models and have started to move more to integrated land uses. These land uses mean that people can live, work and shop in the same area to promote compact cities around urban centres of employment (Echenique et al., 2012). It is the belief that people should not have to drive everywhere and that real estate developers' design should add value to a place (Schweitzer, 2011). This idea has also challenged town planners and developers to be more creative and innovative in their designs, since restrictions were imposed on developments on the periphery of the cities. City Councils ran into problems with regards to the provision of services to the outskirts of cities. As water and electricity became scarce resources, the Councils became more interested in compacting the cities to enable an easier supply of these scarce resources. This concept of developing on the outskirts is known as "urban sprawl" (Tonkin, 2008). The location of a residential development plays a major role in the success of sales, as Charnock et al. (2014) explained about the value of unique resources, commodities or locations. Unique locations enable the owners of these locations to charge monopoly or premium prices or rent due to the attractiveness in relation to other amenities or different uses (Charnock et al., 2014). The authors also mentioned that the close proximity to transportation and communications networks, makes a location highly desirable, due to accessibility.

Public transport also started to play a bigger role as the design of cities started moving towards mixed-use, high density and transport-oriented. However, Schweitzer (2011) believed that urban development is complex and everyone designs for their own gain and profit in the market. This is an aspect that frustrates most planners, architects and developers. It is difficult to formulate a uniform design for an area, when each developer has his or her own agenda (Schweitzer, 2011). Schweitzer (2011) also highlighted a section she covered in a book review called "Suburban Nation", which stated that "it is utter nonsense to believe that we can entrust the making of community to forces that are, by definition, primarily interested in making money". This raises the concern of real estate developers that develop for their own financial gain, without considering the needs of the people. Is their main to grow their empire and stocks from all their profits or is it to understand what people in an area need? Is it necessarily



unethical for developers to grow their stock prices and put their investors' needs first? The research will investigate the residential developers' business models to determine their objectives and whether they are innovating these models to adjust with a changing environment and trends.

Tonkin (2008) quotes a definition of sustainable development by the World Commission on Environment and Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains two key concepts. First, the concept of "needs", particularly the essential needs of the poor, to which overriding priority should be given; and second, the idea of limitations imposed by the state of technology and social organisations on the environment's ability to meet present and future needs" (Tonkin, 2008, p.17). Brown (2015) stated that the distinguishing factor between "good developers" and "poor developers" is whether or not they care about more than just profits. "Good developers" focus on "good design, quality products, excellent service, happy customers, good reputations, place making, community contributions, legacies and enjoyment in their work" (Brown, 2015, p.234). According to Brown (2015) developers who put the aforementioned factors after profits, had a very slim chance of being successful.

With sustainable developments, RPDs must strive to meet the sustainable needs of economic, social, ecological, physical and political areas (Tonkin, 2008). By being more innovative; RPDs can use different housing typologies to increase densities by means of infill housing in urban areas, meeting the residential needs of the people, and create a sense of place and belonging. The aim would be to address the urban design, environmental performance, social-, affordability- and safety objectives of the people who wish to reside in the area (Tonkin, 2008). Randolph and Tice (2013) also stated that "the housing market in any one locality is characterised by a hierarchy of overlapping socially and spatially defined segments. Each segment has its own distinctive economic, social and locational characteristics, defined both in terms of the structure of provision on which it is based and the social characteristics of the population it accommodates" (Randolph & Tice, 2013, p.1665).

Sustainability as discussed in the theory seems like a logical concept for RPDs to follow and implement within their business models, but theory does not always reflect reality. Do RPDs in Gauteng still consider sustainability, given the issues they face on a day-to-day basis?

## **2.4.2 Residential business models**

RPDs can be innovative with housing mixes to ensure that they still achieve their required return on investment. They could develop top units as penthouse apartments and charge significantly more for them than the lower units, which could be entry level units for first time buyers or normal family-sized units. Residential developers could therefore construct various types of housing within the same building (Randolph & Tice, 2013). The residential layout and mix of housing could be dependent on the business model that each RPD follows. Through interviews, it will be determined where each developer's competitive advantage lies. Konishi (2013) also stresses the importance of pricing units correctly.

Business model innovation has allowed some residential developers to mix their housing typologies within a single development to accommodate low-income as well as high-income families (Vale & Shamsuddin, 2017). Through the interviews it will be determined whether RPDs in Gauteng still have a profitable economic business model for a uniform estate layout or whether they should use a combination of various housing typologies. Wirtz, Pistoia, Ullrich and Göttel (2016) stress the necessity of a sustainable business model, which seems important in recent times where companies must gain a competitive advantage, while considering the company's impact on society, environment and multiple stakeholders.

## **2.5 Business models**

### **2.5.1 Definition**

There have been various definitions of business models since the early 2000's, but they mostly address the same components. Below are some definitions to enable a general understanding of what a business model entails.

*"A business model describes the rationale of how an organisation creates, delivers and captures value" (Osterwalder & Pigneur, 2010, p.40).*

*"A business model provides a holistic picture of how a company creates and captures value by defining the 'Who', the 'What', the 'How' and the 'Why' of a business" (Gassmann et al., 2014, p.9).*

*"The concept incorporates a number of specific business characteristics that are fundamental to any company: (1) a means of creating consumer value and delivering it*

*to a target group of consumers; (2) a means of generating profits; and (3) a means of using existing resources and processes to promote the stable interaction of mechanisms for creating consumer value and generating profit as well as ensuring enduring competitive advantages” (Bereznoi, 2015, p. 3)*

Baden-Fuller and Haefliger (2013) stated that the traditional view of a business model is when the model lies within the traditional strategy view of a long term competitive advantage (Boons & Lüdeke-Freund, 2013; Wirtz et al., 2016; Wrigley et al., 2016), although the authors argued that it should be a stand-alone concept since it is a model and must be viewed as such. Those companies aiming for a competitive advantage through unique value propositions can utilise their business models to execute their strategies on the market (Boons & Lüdeke-Freund, 2013; Wrigley et al., 2016). It is also argued (Markides & Sosa, 2013) that there needs to be a distinction between market entry decisions and business model choice. Markides and Sosa (2013) define a business model as an activity system consisting of various reliant activities, the selection of customers and the selection of products or services provided by the company. Baden-Fuller and Haefliger (2013), Saebi and Foss (2015), Evans et al. (2016), Bashir and Verma (2017) as well as Evans, Vladimirova, Holdago, Van Fossen, Yang, Silva and Barlow (2017) further explained that the business model should be able to link value capture with value creation. The authors have also raised the question of how business models change with the progression of innovation. Achtenhagen, Melin, and Naldi (2013) also agreed with the importance of a changing business model, for firms looking to achieve sustained value creation.

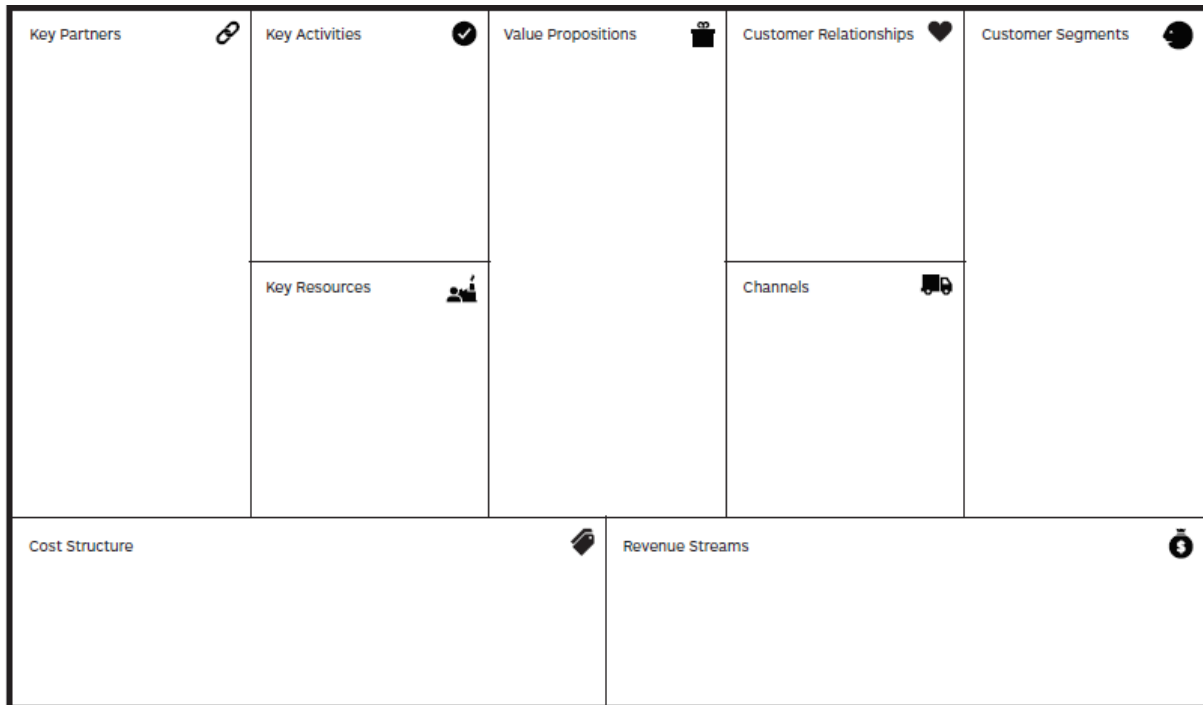
Baden-Fuller and Haefliger (2013) as well as Wirtz et al. (2016) explained that business models are recipes, which must be used by a company’s management team to make strategic decisions, but they believed there is still a knowledge gap between rational decision making and following the business model for investment decisions. According to Boons and Lüdeke-Freund (2013), different economies call for different business models as their conditions for production and consumption differ considerably in the light of sustainable development. Emerging economies, such as South Africa, are characterised by satisfying basic needs and increasing purchasing power, while trends of rapid industrialisation and urbanisation will need new solutions to meet these customer needs (Boons & Lüdeke-Freund, 2013).

### **2.5.2 Business model canvas**

Osterwalder and Pigneur (2010) designed the business model canvas to provide a business model concept that was easy to understand, so that everyone could apply it in their

organisations. The business model canvas consists of nine components and can be seen in the figure below.

**Figure 3: The business model canvas**



Source: (Osterwalder & Pigneur, 2010; Strategyzer, 2011)

### 2.5.3 Business model components

According to Baden-Fuller and Haefliger (2013) as well as Boons and Lüdeke-Freund (2013), the business model needs to address four specific areas; namely customer identification, customer engagement, value delivery and monetisation. Customer identification relates to the people or entities that are paying for the product or service. Customer engagement is the method through which the product or service is delivered to the customer. Value delivery can be done by means of integration, while monetisation in business models covers “when, what and how” money is raised (Baden-Fuller & Haefliger, 2013). Wirtz et al. (2016) also added that the components of a business plan need to be designed in such a way to maximise revenues and further suggests that the business model should consist of strategic, customer, market and value creation components.

Markides and Sosa (2013) believed that innovation in business models could follow a semi-structured approach to continuous innovation and remaining the dominant competitor in the

market, which in this case is the residential property market. The first step would be to target the average consumer rather than the early adopters. Secondly, the business plan should support low prices. By driving costs down, the leading firms will capture the larger market share and enjoy economies of scale. Thirdly, the business model must include branding and communication to ensure a larger potential customer base. The fourth step is to be able to provide the product or service to the mass market through expansion. Step five includes forming alliances and building relationships with main suppliers and producers of goods, like the suppliers of construction material, to control some of the key inputs. The sixth and last step entails the exploitation of first mover advantages and protecting the market. Although there are many reasons why businesses could be successful, having an innovative business model could be one of the main drivers of a particular company's success, whether they are early movers or late entrants (Markides & Sosa, 2013).

The business model components will now be discussed with regard to the business model canvas.

### **2.5.3.1 Customer segments**

The first component is the most important, comprising of the various people an organisation aims to target (Berends, Smits, Reymen, & Podoyntsyna, 2016; Gassmann et al., 2014; Osterwalder & Pigneur, 2010; Wrigley et al., 2016). A company can choose to serve more than one target segment. For this study the target segments include affordable housing, medium income housing and high income housing. Customer segments can vary between mass market, niche market, segmented, diversified or multi-sided markets (Osterwalder & Pigneur, 2010).

### **2.5.3.2 Value propositions**

Value propositions are the products and services that a company offers, which benefit the customers and make them choose the company over its competitors. A company's value propositions must address the needs of the customer. Companies often innovate their business models by improving their value propositions or by other means. The following elements can form part of the value proposition innovations: newness, performance, customisation, "getting the job done", design, brand or status, price, cost reduction, risk reduction, accessibility and convenience or usability (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.3 Channels**

Channels are the means of communicating with your customers as well as the methods of distribution of the company's product or service. Channels can include any means of marketing from outdoor advertising and flyers, to e-mails and social media but it also relates to the after-sales relationships between the buyer and seller (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.4 Customer relationships**

This component refers to the relationships a company would like with its customers, whether it is a personal or an automated relationship. There are various motives for customer relationships and they differ according to a company's desire to acquire new customers; retain existing customers; or for upselling purposes. Different forms of customer relationships include general personal assistance, dedicated personal assistance (like private banking services), self-service, automated services, communities (such as a community group on social media) and co-creation (where customers help design new products or an online reviewing system) (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.5 Revenue streams**

During this component, the company must first determine what the perceived value of their product or service is among their customers. Secondly, the company must generate a positive earnings after the costs have been subtracted from the revenues. The costs to customers can be amended, depending on whether the company is selling to a "once-off" customer or a recurring customer. The revenue streams can include items such as an asset sale, usage fee, subscription fee, lending/renting/leasing, licencing, brokerage fees and advertising. All of these items can be structured in innovative ways to generate profit (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.6 Key resources**

The sixth component is necessary for a company to deliver its value to its customers and make the business model work. The key resources can include physical (buildings, vehicles and machines), intellectual (brands, patents and copyrights), human and financial (banks and investors) (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.7 Key activities**

This component refers to the activities on which a company spends most of its time and which generate the most value so the company can operate successfully. These activities can include the production (design, manufacturing and delivery of product or service), problem solving and platform or network (like webpages or personal networking) (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.8 Key partnerships**

Companies form partnerships for a number of reasons. To form strategic alliances; when the company and its competitors are working towards a common goal; to form joint ventures when a project might be too capital intensive and full of risk for one company to absorb; or to keep costs down and ensure future business between buyers and suppliers (Berends et al., 2016; Bereznoi, 2015; Evans et al., 2017; Osterwalder & Pigneur, 2010; Wrigley et al., 2016).

### **2.5.3.9 Cost structure**

The last component of the business model involves all the costs incurred by a company. The cost structure can be amended depending on the purpose and structure of the company. It could be focused on a cost-driven or value-driven structure. Advantages in costs can be gained through economies of scale or economies of scope (Berends et al., 2016; Bereznoi, 2015; Osterwalder & Pigneur, 2010; Wrigley et al., 2016). Bereznoi (2015) mentioned how the restructuring of the cost structure and income generation have shaped a number of successful companies today.

## **2.6 Innovation**

A distinction between various forms of innovation was introduced by Procter & Gamble as a leading innovation firm. The four types of innovation which they identified included “sustaining innovation”, “commercial innovation”, “transformational-sustaining innovation” and “disruptive innovation” (Brown & Anthony, 2011). The following section will cover these four types of innovation as well as the concept of “open innovation”, to form a clear idea of how business models could be innovated. It is argued that closed innovation is a traditionalist approach and that a diminishing number of companies use it (Saebi & Foss, 2015).

### **2.6.1 Sustaining innovation**

Sustaining innovation covers all the small improvements companies make to their products, processes and business models to obtain a small competitive advantage or a first mover advantage; such as a new flavour or feature on an existing product to make it better than the previous model (Bereznoi, 2015; Brown & Anthony, 2011; Evans et al., 2017). Bozkurt and Kalkan (2014) agreed with this innovation type and referred to it as product innovation, stating that these normally included innovations within the functionality and user characteristics of a product or process. Hargadon (2015) said this innovation type is when a company makes small incremental changes.

### **2.6.2 Commercial innovation**

Commercial innovation focuses on channels of communication and on aesthetic features. It concerns the marketing and packaging of a companies' products or how it delivers services to its customers and whether it can run promotional packages as part of its sales-increase techniques (Brown & Anthony, 2011). Bozkurt and Kalkan (2014) referred to the commercial innovation type as a marketing innovation aimed at customer needs specifically. Bereznoi (2015) adds to this by stating that consumer value can be delivered in new ways and it might benefit the company to restructure this in more interactive ways.

### **2.6.3 Transformational-sustaining innovation**

This innovation approach can change a market significantly with fundamental improvements to the business model, which can easily capture the market for the innovating company, increase profit levels and increase acceptance among its customers by building a reliable brand (Bereznoi, 2015; Brown & Anthony, 2011). Bozkurt and Kalkan (2014) added to this and argued that major changes in methods or equipment can be a transformational-sustaining innovation. This can relate to innovations in building material or new construction techniques to speed up processes drastically. Bereznoi (2015) also discusses the importance for companies to rethink the way they satisfy their customers' needs.

### **2.6.4 Disruptive innovation**

Disruptive innovations are very rare and can change an industry completely. They are new to the world and form a market of their own. Introducing a disruptive innovation to a business model could gain a major competitive advantage as a first mover of the technology or process



(Brown & Anthony, 2011; Evans et al., 2017). As Hargadon (2015) argued, this type of innovation involves significant changes to both a company's products and processes simultaneously.

### **2.6.5 Open innovation**

Henry Chesbrough (2012) is known as the “father of open innovation” and he introduced the concept in 2003 in his book called “*Open Innovation: The New Imperative for Creating and Profiting from Technology*”. The author defines closed innovation as vertical integration within a company. He then goes further and defines open innovation as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation” (Chesbrough, 2012, p.20). Chesbrough (2012) explained that there are two types of open innovation. The first is known as “outside-in open innovation” and occurs when a company opens up their innovation processes to assistance from external organisations and professionals. The second form is known as “inside-out open innovation” and is used when external organisations and professionals release their unused innovative ideas for other companies to utilise (Chesbrough, 2012; Tucci, Chesbrough, Piller, & West, 2016).

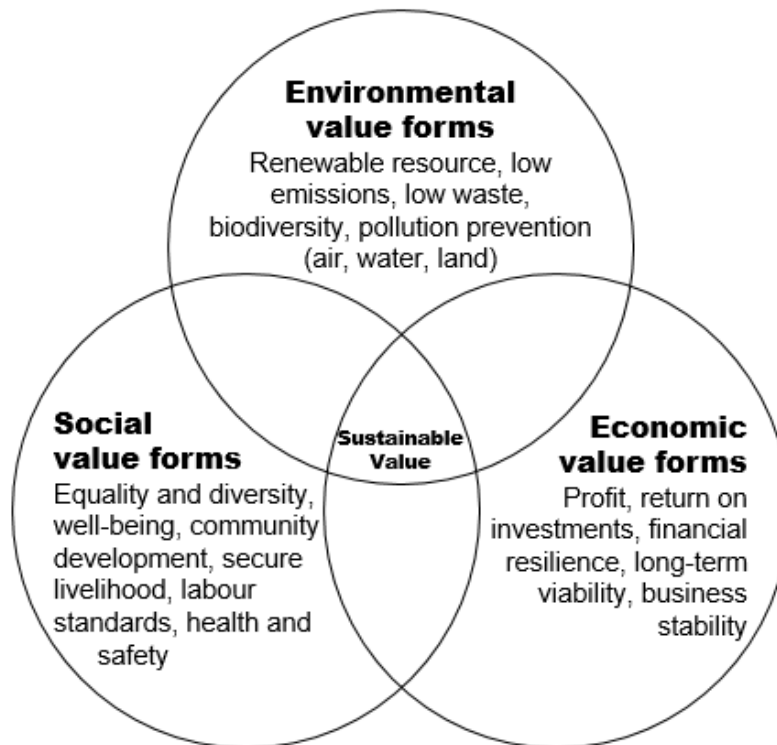
There are conflicting views on whether open innovation is beneficial to a company's business model and some beliefs are that companies tend to come up with the same innovations due to their knowledge base, so they would be able to accelerate innovations within the company if they made use of knowledge external to the company (Evans et al., 2017; Saebi & Foss, 2015). The external knowledge could be a consulting company or individuals that specialise in specific fields. Research has been done on open innovation where it has indicated that the returns, benefits and profit decrease over time as the costs of being open to external knowledge surpass the benefits (Saebi & Foss, 2015). For open innovation to be successful, both the company and the external organisation that provides the knowledge input needs to be aligned in terms of their organisational design, practices and capabilities to align the open innovation strategy (Saebi & Foss, 2015). Teece (2016) also supports the notion of open innovation by stating that the collaboration with key partners within the company's business environment, is beneficial to the success of the innovation process. The author did however mention that open innovation could fail if the partners were lazy and made little to no contribution to the innovation process (Teece, 2016). Open innovation also includes the management of knowledge exploitation, exploration and retention from both companies involved in the innovation process (Saebi & Foss, 2015).

Open innovation, as explained in the theory, is still a relatively new concept and it is not yet justifiable whether it is the preferred method of innovation for companies. It is also not clear whether the theorists believe that open innovation can be seen as beneficial to all companies or whether it is industry specific. There is a lack of theory on open and closed innovation processes with regard to RPDs' business models. What is the influence of open innovation, as opposed to closed innovation, on RPDs' business models?

## **2.7 Business model innovation**

It is argued that companies cannot follow past approaches and rely on their existing business models to survive in the future, so they must innovate their business models continuously to ensure long-term competitive success (Gassmann et al., 2014; Wrigley et al., 2016). Baden-Fuller and Haefliger (2013) further stated that competitive dynamics in a given market do not only impact product margins, but also the business model feasibility. Baden-Fuller and Haefliger (2013), Bereznoi (2015), Berends et al. (2016) as well as Bashir and Verma (2017) argued that companies would have to change their business models with technological advances in an industry, in order to incorporate these features as part of their business plan and increase the customer value for an improved competitive advantage. Boons and Lüdeke-Freund (2013) agreed with this and stated that the creation and delivery of customer value is the core focus of any business model. Joyce and Paquin (2016) agreed that business model innovation needs to deliver and capture more value, but adds that sustainability is the main driving force behind creative innovation within business models. More companies are changing their business models to generate a triple bottom line, by not only focusing on the economic benefits, but also the environmental and social value creation determined by the company's actions (Joyce & Paquin, 2016). Evans et al. (2017) also supports the idea that companies are striving towards the generation of a triple bottom line and provides an illustration of the triple bottom line and where it achieves sustainability within the business model. In this illustration the important factors within each bottom line are highlighted.

**Figure 4: Sustainable value for the triple bottom line**

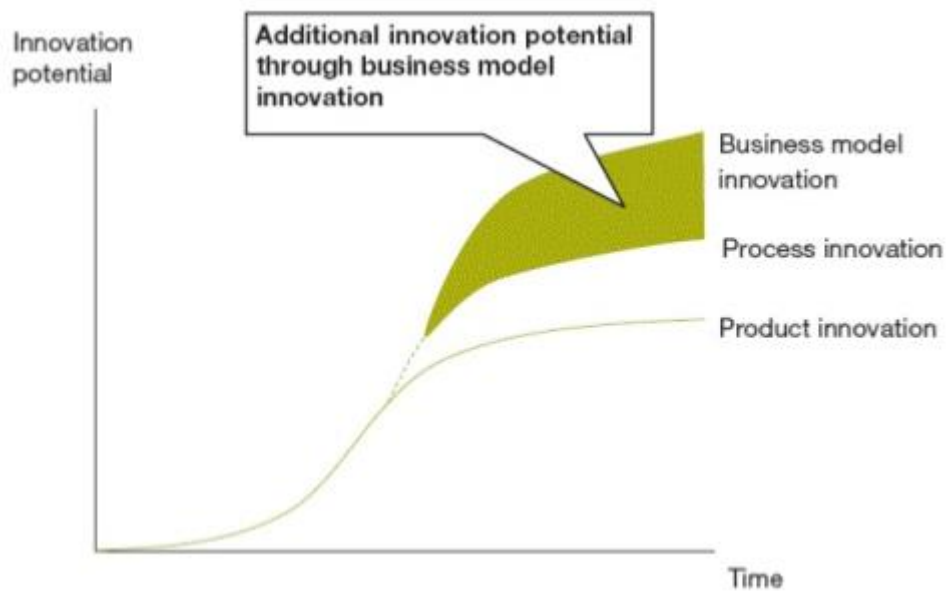


Source: Evans et al. (2017)

It is still relatively unclear whether RPDs consider the triple bottom line when compiling their business plans. Is this a consideration within Gauteng or do RPDs only focus on achieving the economic bottom line due to the housing shortage that has become a large driver in their businesses?

Gassmann et al. (2014) illustrated the importance of business model innovation over process innovation and product innovation, which can be seen in the figure below. Gassmann et al. (2014) as well as Bashir and Verma (2017) wanted to emphasise that there are more benefits to improving the company's business model, than amending a process or changing a product in the company. Bashir and Verma (2017) further stated that new products and services are not as successful as they used to be to push profits, since countries like China can easily copy and match any product or service being offered for cheaper.

**Figure 5: Additional innovation potential through business model innovation**



Source: (Gassmann et al., 2014)

Markides and Sosa (2013) explained how first mover advantage could influence the structure of a company's business model. The authors believed that there is a relationship between first mover advantage and performance, which should be indicated by a company's business model. Markides and Sosa (2013) stated that some companies' business models might include the decision to avoid being the first movers, as they might not dominate the market due to the initial costs. George and Bock (2011) argued that there are several studies that assess the relationship between business models and technology innovation. In the context of innovation, a business model is a framework that takes inputs (such as technological characteristics) and converts them into economic outputs through customers and markets (George & Bock, 2011). Gassmann et al. (2014) developed a unique model for business model innovation, which they called the "magic triangle".

**Figure 6: The magic triangle for business model innovation**



Source: Gassmann et al. (2014)

The “magic triangle” asked four questions about the business model, which a company needs to answer during any innovation:

1. “The customer – who are your target customers?”
2. The value proposition – what do we offer to customers?
3. The value chain – how do we produce our offerings?
4. The profit mechanism – why does it generate profit?

(Gassmann et al., 2014, p.13-14)

The authors stated that when a company wants to innovate their business model, they have to modify at least two of the dimensions from the “magic triangle”.

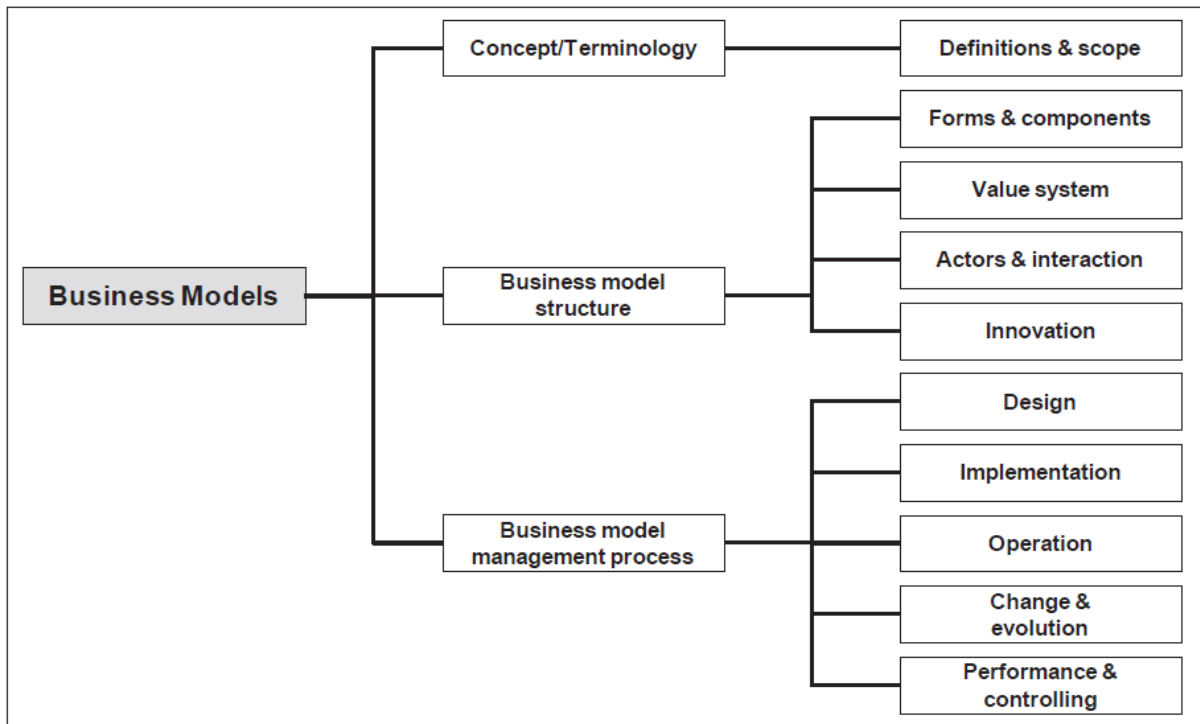
Wirtz et al. (2016) stated that there are still many uncertainties with regards to business models and what constitutes a good business model. Research is still necessary on how business models compare between companies in the same industry. How many similarities do they share and how many of these companies try to amend their business models with incremental innovations? The authors also stated that there is still a large research issue with regards to the “methods of testing the feasibility, capacity and profitability of business models” (Wirtz et al., 2016, p.46). Another uncertainty identified by George and Bock (2011) is whether a change in business model results in the firm’s organisational restructuring or whether organisational design and knowledge management determine business model structure. Additional research is necessary, not only to clarify the links between business models and organisational

innovation, but also to clarify the mechanisms and processes of business model innovation and change (George & Bock, 2011). Hargadon (2015) argued that most companies struggle to innovate their business models, because they struggle to build new capabilities, whether it is through open or closed innovation. This is mostly because the leaders of the company become set in their routines, technologies and knowledge and struggle to accept change (Hargadon, 2015). Related to this issue, there are barriers to intellectual trade for open business model innovation, where academics and industry professionals refuse to exchange ideas (Tucci et al., 2016).

According to Wirtz et al., “business model innovation occurs when a firm adopts a novel approach to commercialising its underlying assets” (2016, p.45). Achtenhagen et al. (2013) further contributed to the statement by defining a number of sections where innovation could take place within the business model, such as new products/services, new markets, changes in the value chain, changes in key activities, changes in key resources or changes in the cost structure. George and Bock (2011) had an opposing view and believed that the language of innovation is almost entirely absent from practitioner perceptions about business models. This does not mean that business models cannot be innovative, nor that innovation plays no role in business model formation or change, but rather that innovation is not necessarily a crucial element of a business model (George & Bock, 2011). Evans et al. (2016) described business model innovation as a potential mechanism to integrate sustainability into business. However, the authors believed that there is a lack of clarity, consensus and consistency regarding the terms ‘business model’, ‘business model innovation’ and ‘sustainable business models’. There is also a lack of established theoretical grounding in economics or business studies (Evans et al., 2016).

According to Evans et al. (2016), the lack of appropriate case studies made it difficult for firms to understand how to innovate their business models, identify and design alternatives, and finally select the most suitable one. However, if firms are finding it difficult to innovate their business models, yet business model innovation is critical for survival, how do RPDs overcome this problem?

**Figure 7: Important areas of the research on business models**



Source: (Wirtz et al., 2016)

From the figure above, Wirtz et al. (2016) identified various areas of further research with regards to business models. This research will focus on the innovation aspect under business model structure.

## 2.8 Conclusion

The literature review aimed to address the trend of innovation in the residential property business. It discussed various influencing factors that could change the way RPDs compile their business models and identified some areas for research. Specific emphasis was placed on the role of financial institutions, sustainability, the triple bottom line as well as open and closed innovation. A better understanding is required on the techniques in which RPDs innovate their business models to gain a competitive advantage.

## **CHAPTER 3: RESEARCH QUESTIONS**

### **3.1 Introduction**

In Chapter 2, the literature on innovation processes and techniques were discussed with regard to business models as well as a detailed analysis of the formulation of a business model. The chapter also discussed some of the key trends in the residential property industry and how residential property developers' businesses were affected by these trends.

From the literature, some areas for further research were identified and Chapter 3 details the research questions on which the study will be formed.

### **3.2 What role do financial institutions play in the success of residential property developers' businesses?**

Bryson and Lombardi (2009) support the importance of financial institutions' role in property development by stating that the difficulty in property development lies in the acquisition of sites, since this requires a large financial investment. During a bust, financial institutions become stricter on lending to investors and normal interested home owners (Gaffney, 2015; Holgersen, 2014). Only once the cycle starts moving to a boom, do financial institutions gain confidence in the markets again and become more lenient to lending rates.

But do residential property developers (RPD) still rely on financial institutions as a large part of their business, since banks have become so strict on lending rates during these tough financial times? Do the financial institutions still have confidence in RPDs to invest large amounts of money into the residential market? How involved are financial institutions in this day and age, with regards to residential property development?

### **3.3 How has the concept of sustainability influenced the formulation of residential property developers' business models?**

As mentioned before property developers have changed their business models in innovative ways to incorporate various uses such as corporate, commercial, residential and recreational within a single development to create more self-sustaining cities (Herbert & Murray, 2015). Krueger and Buckingham (2012) also support these statements by mentioning the benefits to infill developments and using the existing transport infrastructure and public amenities to create a vibrant new mixed use city. It was also stated by (Echenique et al., 2012) that all the



land uses are now mixed up in such a way that people could live, work and shop in the same area all within close proximity to each other to promote compact cities around urban centres of employment. Schweitzer (2011) however believed that urban development is complex and everyone designs for their own gain and profit in the market.

So do RPDs still design developments with sustainability in mind or is it a theoretical concept that is not being implemented in their business models?

### **3.4 How do residential property developers innovate their business models?**

It was mentioned by Randolph and Tice (2013) that residential developers could construct various types of housing within the same building. The residential layout and mix of housing could be dependent on the business model that each RPD follows. Business model innovation has allowed some residential developers to mix their housing typologies within a single development to accommodate low-income as well as high-income families (Vale & Shamsuddin, 2017).

Is this the only way residential developers innovate their business plans or do they innovate in many different ways? Do the RPDs innovate their business models in the same way? Do they follow some trends?

### **3.5 What influence does closed innovation, as opposed to open innovation, have on residential property developers' business models?**

There are conflicting views on whether open innovation is beneficial to a company's business model, where some beliefs are that companies tend to come up with the same innovations due to their knowledge base and therefore they would be able to accelerate innovations within the company if they make use of knowledge external to the company (Evans et al., 2017; Saebi & Foss, 2015).

Do RPDs in Gauteng make use of external knowledge or do they rather keep the innovation processes within the company through a closed innovation approach?

### **3.6 How does the triple bottom line affect residential property developers' business models?**

More companies are changing their business models to generate a triple bottom line, by not only focusing on the economic benefits, but also the environmental and social value creation determined by the company's actions (Joyce & Paquin, 2016).

Do RPDs consider generating a triple bottom line or do they only focus on the economic bottom line?

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

This chapter describes the research methodology that was used in this study about business model innovation for residential property developers (RPD) in Gauteng. The chapter covers the context under which the study was conducted as well as the rationale for the methods that were used. It also addresses the population, unit of analysis, sampling method and size, measurement instrument, entire data gathering process, analysis methods and the limitations of the study.

### **4.2 Research method and design**

An interpretivist research philosophy was followed for this research paper. This type of research philosophy involves the study of innovation processes used to improve RPDs' business models. The research aimed to gain a better understanding of the decision making processes of developers and their point of view, considering residential township layouts (Saunders & Lewis, 2012).

A 'top down' approach to theory development was followed, since the theory on the related topics has been presented in Chapter 2 and this study aimed to uncover similarities and differences with the theory. Although deductive reasoning is used for this study, there are some elements of inductive reasoning as well. A number of face-to-face, semi-structured interviews were conducted for this study. An interview schedule containing a number of questions under each theme, was used to guide each interview and generate in-depth answers for analysis (Merriam & Tisdell, 2015; Saunders & Lewis, 2012). The interview schedule was structured in such a way that each participant could speak freely and provide their experiences and views on particular topics.

This research paper aimed to gather general information about RPDs' business plans and the innovation processes involved to gain a competitive advantage within Gauteng.

### **4.3 Population and sampling frame**

According to Zikmund, Babin, Carr and Griffin (2010) a population is a complete group that share the same formulation of attributes. The authors then further also define the sampling frame as the "working population" since they will become the units involved in the analysis

(Zikmund et al., 2010, p.391). The population for this study included all RPDs within Gauteng. Developers of affordable housing, medium cost housing, stack housing, lifestyle estates, golf estates and equestrian estates formed part of this population. A sample from this population was selected as discussed in more detail in 4.4 below. Some researchers referred to the sample in qualitative research as “research participants or selected participants” (Bloomberg & Volpe, 2012).

The participants had to be in decision-making positions and directly involved with the business plans and strategy of the company. This enabled each participant to provide valuable views and insight on their experiences in formulating their companies’ business plans and how they have changed it over the years. The participants were either the Chief Executive Officer (CEO), Managing Director (MD), Senior Manager (SM) or founder of the company. Other employees from these companies, would not have been able to provide relevant and insightful views on the influences of innovation on these companies’ business models.

The study was limited to Gauteng due to the housing backlog (Wertman, 2015), which is evident in the province. The issue of a massive housing backlog in a province that hosts the capital city (Pretoria) as well as the economic hub (Johannesburg) of South Africa, concluded the decision to focus on Gauteng for this study.

#### **4.4 Sampling**

Sampling within a business research study is normally done due to a lack of time and money to survey the entire population (Zikmund et al., 2010). A non-probability sampling technique was used for the data collection. Purposive sampling, or also known as judgement sampling, is generally used for non-probability sampling and can be analysed using qualitative analysis techniques, while it relies on the researcher’s experience and originality to obtain units of analysis in a way that they can be regarded as a true representative of the study population (Welman, Kruger & Mitchell, 2005; Zikmund et al., 2010). The reason for a purposive sampling technique was due to the existing personal network with the various RPDs that were interviewed and since only they all have similar characteristics, only a small sample was necessary for the semi-structured interviews (Zikmund et al., 2010). It is also argued that the quality and depth of analysis done by the researcher, reduces with each additional interview conducted (Creswell, 2012). The decision was made by the researcher, not to have too many additional interviews after saturation was reached, in order to provide a good quality analysis.

A total of 14 RPDs were phoned and e-mailed to be interviewed as the sample from the population, but only ten of them confirmed and accepted to be interviewed. Data saturation occurred as soon as the additional answers being obtained through the interviews, provided few new insights into the research questions and objectives (Saunders & Lewis, 2012; Suter, 2012).

#### **4.5 Unit of Analysis**

The unit of analysis was on an individual level and the RPDs themselves formed the unit of analysis. Each developer was interviewed to gain a better understanding of their experiences and views on innovation processes with regards to business plans and how these developers influenced the companies' business plans during changes in the residential market.

#### **4.6 Data collection method**

##### **4.6.1 Introduction**

Face-to-face individual interviews are a costly and timeous approach to obtaining data (Creswell, 2012). The investigator's perspective on pieces of information determines whether pieces of information becomes data in a study (Merriam & Tisdell, 2015; Suter, 2012). A semi-structured interview procedure was used to ensure continuity and flow across all the interviews (Creswell, 2012; Tracy, 2013). The reason for the semi-structured interview process was to allow for new questions that could be presented during the conversation to provide additional insight into the topics being covered.

Each participant was asked to give their written consent to be interviewed and the standard consent form was signed prior to the start of the interview. The participants were informed that they will be kept anonymous and that they could withdraw from the interview at any point in time (Myers, 2013). Interviews were conducted to gain specialist insights from people in the industry and these insights could not be obtained by method of observation (Merriam & Tisdell, 2015).

##### **4.6.2 Interview schedule**

The schedule for the interviews had pre-formulated questions, but there was no strict adherence to them and the participants were allowed to elaborate on their answers, whereas the researcher had the opportunity to ask additional questions originating from the formulated

question when the opportunities presented themselves (Tracy, 2013). The interviews however started with all the same formulated questions. The participants were able to talk freely and share everything that they considered important with regards to the topic areas (Myers, 2013). The interview schedule was designed in such a way, that each interview would last approximately 45 minutes (Saunders & Lewis, 2012). The interview schedule was designed in such a way that it could first provide the researcher with some background information on each participant and then discuss each theme. Background information such as place of birth and tertiary studies provided valuable information seeing as the unit of analysis was on an individual level.

#### **4.6.3 Pilot interview**

One pilot interview was conducted. The participant was selected due to his extensive experience in the development field as a senior manager at his company. The researcher knew the participant owing to a previous working relationship. The participant was asked to provide feedback on the interview schedule and inform the researcher whether the questions were all clearly defined. The aim of the pilot process was to create a good natural flow for the semi-structured interviews with the aim of ensuring the best outcome of data collection (Tracy, 2013). The researcher was able to confirm that the questions were clear and added value to the data. The pre-testing provided the researcher with more confidence with regards to the interviewing process, enabling a relaxed interview environment with the formal interviews (Merriam & Tisdell, 2015; Tracy, 2013). The participant confirmed that all the questions were clear and that he was comfortable to answer them all. No amendments were therefore made to the interview schedule and the decision was made to proceed with the interviews.

#### **4.6.4 The interviews**

The aims of the interviews were to provide a broad view on the entire innovation process of building, selling and leasing houses and to obtain the personal opinions from the specialist developers on the residential market and how they structure their business plans to gain a competitive advantage over their competitors (Myers, 2013). In order to obtain the best possible responses from each participant the researcher had to “have integrity and be honest” (p.452); have patience throughout the duration of the interview; pay attention to everything including the smaller detail and never jump to conclusions; for the researcher to keep his opinions to himself; “be a good listener” (p.452); to keep the responses including the participant’s name confidential; and respect the rights of all the participants with regards to

their willingness to provide the researcher with information (Creswell, 2012; Zikmund et al., 2010).

A disadvantage of the interview process was that non-verbal communication, like hand signs and facial expressions could not be captured on the recording and had to be noted by the interviewer if deemed necessary. Therefore some of this information could have been missed during the interviews (Creswell, 2012; Myers, 2013).

The interviews were conducted over a period of four weeks. All the participants were informed that the interview could take up to 60 minutes, but the interviews ended up taking between 14 and 43 minutes. The time spent on the interviews all depended on the willingness of the participants to share their views and whether they were under pressure to attend any other meetings directly after the interview. The interviews were conducted within boardrooms at the offices of each participant, to ensure that there were as little noise disruption as possible (Tracy, 2013). Only one of the interviews were conducted at the participant's house during a weekday morning due to the lack of time for interviews at any other time.

Participants were informed that the interview process was completely anonymous and that they could withdraw at any time (Creswell, 2012; Tracy, 2013). Consent forms were signed before each interview to provide the participant's permission to participate in the study and to confirm their anonymity (Creswell, 2012; Tracy, 2013). The participants were allocated names for the study and ranged from "Developer 1" to "Developer 10". Developer 7 requested the researcher to sign an additional non-disclosure agreement since he was sharing sensitive information about the company.

#### **4.7 Interview transcription**

The interviews were recorded with a mobile audio voice recorder application called "Voice Recorder" and then word-processed immediately after each interview. Each interview audio recording is filed and stored along with its Word-processed version for reference purposes, should they be required in the future for further research. The audio recordings as well as the transcriptions were stored on an external storage device as well as in a Dropbox folder (cloud storage), to prevent any occurrences of data loss. The researcher decided to use the "Voice Recorder" application, because its recording quality was very clear and the application was easy to use. The recording stopped during the interview with Developer 5, when an incoming call stopped the recorder. The transcription for Developer 5 was then done immediately after the interview, while the interview was still fresh in the mind of the interviewer. Notes were

made during all the interviews in case there were any difficulties experience with the recorder, such as the case of Developer 5. After the interview with Developer 5, the researcher switched the mobile phone to Airplane Mode, to avoid any phone calls interrupting the recording process again. The researcher made use of a transcription service to speed up the transcription process. The researcher validated each transcription as they were received. As part of the validation process, the researcher listened to each interview audio file while reading through the transcriptions to ensure that the interviews were transcribed correctly (Creswell, 2012; Tracy, 2013). Both the questions asked by the researcher and the feedback from the participants were included in the transcriptions. The transcriptions were all done and kept in Microsoft Word format. They were kept in Microsoft Word format, since the qualitative data analysis computer software being used, could process documents in Microsoft Word format (Creswell, 2012). The qualitative data analysis computer software used is known as “Atlas.ti 8”.

Each interview transcript was edited and the participants’ names were removed from the interviews if and where they were mentioned. Each participant’s name was then replaced by a pseudonym consisting of the word “Developer” and a number (Creswell, 2012; Tracy, 2013). There were ten participants being interviewed and thus the pseudonyms ranged from “Developer 1” to “Developer 10”. This formed part of the anonymity for each participant. The range of the pseudonyms were based on the order in which the participants were interviewed.

#### **4.8 Coding and analysis in Atlas.ti 8**

The interview transcripts were coded to identify patterns by categorising the data (Creswell, 2012; Friese, 2012). By categorising the data, the interrelationships could be drawn within the theory. Through data analysis, the researcher looked for definitive answers to address the research questions. If data was coded improperly , then the results could only be as good as the coded data or in other words “garbage in, garbage out” (Zikmund et al., 2010, p462). The coding was therefore done with focus and patience to ensure proper results to answer the research questions.

One of the easiest and most effective ways of analysing qualitative data in business and management is to use coding, as the codes will embody the meaning in the quotations and words (Friese, 2012; Myers, 2013; Saunders & Lewis, 2012; Zikmund et al., 2010). As explained by Welman, Kruger and Mitchell, (2005), there are various approaches to coding an interview after it has been word-processed, including a word, which can be used to describe a sentence, a paragraph or even an entire interview, depending on the purpose of the study.



The main difference with qualitative and quantitative research, is that coding is done primarily with words and not with numbers (Welman, Kruger & Mitchell, 2005). Labels were assigned to each piece of text that was coded and these pieces of texts were classified into various categories, called groups or families (Suter, 2012). Coding of the transcripts also assisted in organising all the data in a fast and efficient way (Myers, 2013). Open coding was mainly used to code the data, by breaking the data apart, identifying codes and themes to represent raw pieces of data, as the researcher analysed each transcript (Friese, 2012).

The following steps were followed to code the word-processed interviews properly:

1. Sampling. This involved the text identification as well as the units of analysis.
2. Theme Identification. The themes were either created from the literature or the researcher created new themes from the text being analysed. The method of open coding was then used in Atlas.ti 8.
3. Codebook Construction. During this step the researcher established a list of codes. In some cases accompanying definitions were added to some of the codes, where a concept was not obvious to interpret (Friese, 2012).
4. Marking Texts. During this step, the units of texts had codes allocated to them.
5. Model Construction. Here the linkage between all the themes, concepts, beliefs and behaviours were defined in models that illustrated the relationships and networks (Friese, 2012).
6. Model Testing. This step aimed to test the model created in the previous step on a broader set of data (Myers, 2013). The theory related to the model could then either be accepted or rejected.

As mentioned before, ten semi-structured interviews were conducted. From the first to the seventh interview, relevant and new themes emerged from the coding process. However, from the eighth interview new themes and codes were very minimal. The researcher completed the interviews up to interview number ten, to confirm that saturation had been reached.

#### **4.9 Quality, reliability and validity**

The quality, reliability and validity of the research had to be of high value in order to make a valid contribution to academic theory (Tracy, 2013). With regards to the reliability of the study, there is some difficulty in replicating the results of semi-structured interviews, if the data collection techniques were followed as explained in this research, but the questions contained in the interview schedule were formulated in such a way that a replication of this study would obtain very similar results. The questions in the interview schedule were kept straight-to-the-

point and easy to understand. The reason why the data in semi-structured interviews is sometimes difficult to replicate, is because a participant has the opportunity to speak freely on topics and elaborate in certain concepts and themes. If a participant feels more comfortable with the interviewer, the participant will most likely feel more willing to share more information (Tracy, 2013). Research was done on the participants and the companies they worked for before each interview was conducted. This enabled the researcher to first have a casual conversation with the participant about their business and make them feel more at ease, before the interview started.

Validity during the interviews could be confirmed, as the participants had the opportunity to explain certain concepts or knowledge constructs, which were not commonly known to the researcher. The participants also had the opportunity to request clarity around questions they did not fully understand (Tracy, 2013). The researcher was in a position to ensure that the difficult concepts could be explained, if necessary, to confirm the validity of the data being obtained.

The method of triangulation was used to confirm the data, by obtaining various perspectives to clarify the meanings from the responses (Bloomberg & Volpe, 2012; Tracy, 2013). As mentioned above, research was done on the participants and their businesses to confirm their validity as specialists within the residential property industry.

The interviewer had prior experience and knowledge in the residential property development market. The interviewer therefore took cognisance of this and refrained from steering the participants to specific outcomes or answers (Tracy, 2013). The participants were only guided on request of more information during the interviews.

#### **4.10 Assumptions and research limitations**

Any research study has delimitations as well as limitations, whereas the delimitations revolve around the boundaries of the study and were controlled by the researcher and the limitations referred to the factors that could possibly lessen the quality of your data being collected (Bloomberg & Volpe, 2012).

Since the research is conducted within a limited timeframe, a longitudinal study is not possible to determine how RPDs innovate their business models over time as market factors (such as inflation and increased/decreased housing demand) influence their businesses. Political

factors could also influence the research over time, especially with regards to political tensions within a country.

The research is specifically limited to RPDs. The study therefore excludes the views and opinions of commercial, industrial and retail developers. The research is also geographically limited to the boundaries of Gauteng and excludes any developers from the rest of South Africa as well as international developers.

The semi-structured interviews were conducted with the key decision makers in each company, which excludes the rest of the employees' views and opinions on the companies' innovation processes.

The researcher personally knew some of the participants prior to the interviews being conducted, which might have led to an increase of information sharing and richer data collection. Since the participants were aware that the study was being conducted for academic purposes, they might not have felt comfortable to share their negative experiences (Creswell, 2012).

#### **4.11 Ethical considerations**

Ethical clearance was obtained from the ethics committee of the Gordon Institute of Business Science, before the data collection/interviews were conducted. The Gibbs ethical clearance confirmation is attached as Appendix 3.

Once the ethical clearance was obtained, e-mails were sent out to all the possible participants which the researcher wanted to interview, requesting a date and time for the interview to be conducted. The e-mails contained a brief description of the study as well as the consent form. All the participants were comfortable signing the consent form in person just before the interview was conducted. The participants were informed about the anonymity of the study and that their names would not be used within the data. All the participants interviewed, signed the consent forms providing their consent to use the data for this research.

The researcher assured the participants that their participation in this research would not expose them to any penalty or harm and that the study is completely participatory (Tracy, 2013). None of the participants were forced into answering any of the questions (Creswell, 2012; Tracy, 2013). All of the participants were fluent in English and therefore no assistance of a translator was necessary during the interviews. The participants were informed that they

could withdraw from the interview at any given time without any reasons required (Tracy, 2013). The researcher made sure to follow adequate professional ethics before, during and after the interaction with the participants and the research results (Creswell, 2012; Zikmund et al., 2010).

#### **4.12 Conclusion**

This chapter discussed the research methodology that was used to obtain and analyse data for business model innovation for RPDs in Gauteng. The decision was made to make use of a qualitative research approach, by conducting face-to-face semi-structured interviews. The methodology discussed the population, sampling, unit of analysis and data collection technique in full detail. The design of this research project considered the quality, reliability and validity of the study and all necessary ethical clearances were adhered to. The design of the research methods enabled the researcher to obtain valuable insights on the various themes of the study in order to answer the research questions that were posed in Chapter 3.

## **CHAPTER 5: RESULTS**

### **5.1 Introduction**

This chapter presents the key results and findings obtained from ten interviews with residential property developers (RPD) in Gauteng, using the data collection process described in Chapter 4. A description of the participants that were interviewed will be presented to give context to the study. Thereafter, the content of the interviews will be presented and discussed according to the research questions raised in Chapter 3 and the emerging themes will be highlighted.

### **5.2 Description of the participants**

A total of ten interviews were conducted with individuals in decision-making positions who had direct influence and authority over their companies' business plans and strategies. The positions consisted of Chief Executive Officer, Founder, Managing Director or Senior Manager. All the participants' companies are situated in the Gauteng province. The participants' experience in the residential property market ranged from four years up to 30 years. The participants covered various sectors of residential property development, including affordable housing, bonded housing, conventional housing, and medium to high income housing. The companies which the participants work for or own, range from four years to 75 years old.

The interviews were conducted at the participants' offices, except for Developer 2, whose interview was conducted at the researcher's office and Developer 9, whose interview was conducted at the participant's house.

It must be mentioned that there were technical difficulties with the voice recorder during the interview of Developer 5. The entire interview was therefore recorded in notes taken by the researcher and transcribed into a full interview format directly after the interview, while it was still fresh in the mind of the researcher. The rest of the interviews were all recorded by means of a voice recorder and transcribed into a Word format for coding purposes.

**Table 1: Description of Participants**

Participant	Residential Sector	Job Title and Brief Description	Interview (min)	Word Count
Developer 1	Affordable, Medium and High Income Housing	Chief Executive Officer  Developer 1 grew up in Johannesburg and studied B.com Education, his Honours in Financial Management and his M.com in Business Management at the Rand Afrikaans University (now known as UJ). He was a school principal, then opened up his own affordable housing firm and after 15 years moved into the medium to high income housing sector.	40:36	5844
Developer 2	Affordable Housing	Chief Executive Officer  Developer 2 grew up in Kwa-Zulu Natal and studied a B.com degree at the Natal University and moved to Gauteng in 2004. His background is purely financial and he started his company four years ago.	43:23	5619
Developer 3	Affordable housing	Managing Director  Developer 3 grew up in the Free State and studied Quantity Surveying at the Free State University and moved to Johannesburg in 1992. He moved into the affordable housing sector immediately and has been involved in it ever since.	22:18	3123
Developer 4	Affordable Housing	Managing Director  Developer 4 grew up in the Eastern Cape in a town called Alice and	19:54	2790

		studied Quantity Surveying at the University of Port Elizabeth. He has been involved in affordable housing for the past 30 years.		
Developer 5	Affordable Housing	<p>Founder and Managing Director</p> <p>Developer 5 grew up in Namibia and moved to Stellenbosch to study Civil Engineering at the University of Stellenbosch. He moved to Pretoria after graduation. He only did civil engineering for a period of six months and then started his residential development company.</p>	20:00	1753
Developer 6	Affordable and Medium Income Housing	<p>Managing Director</p> <p>Developer 6 was born and raised in a town called Evander in the province of Mpumalanga. He came to Johannesburg to study B.com Accounting at the Rand Afrikaans University (now known as UJ). He first worked for certain banks for a period of four years before he joined the residential development industry.</p>	23:19	3112
Developer 7	Medium to High Income Housing	<p>Managing Director</p> <p>Developer 7 was born in the United Kingdom and moved to South Africa when he was four years old. He then studied Mechanical Engineering at Wits and worked as a mechanical engineer before entering the residential property industry.</p>	34:40	4686
Developer 8	Medium to High	<p>Founder and Chief Executive Officer</p>	13:55	1999

	Income Housing	Developer 8 grew up in Johannesburg and studied Building Science at Wits University. He first worked for another development company before opening his own residential property company.		
Developer 9	Affordable and Medium Income Housing	<p>Founder and Chief Executive Officer</p> <p>Developer 9 grew up in Witbank and studied B.com Marketing at the University of Pretoria. He first worked approximately three years for another property development company before opening his own residential property company.</p>	33:23	4142
Developer 10	Affordable, Medium and High Income Housing	<p>Senior Manager</p> <p>Developer 10 grew up in Pretoria and studied his Bachelors and Masters degree in Town and Regional Planning at the University of Pretoria. He first worked for a local town planning firm before he joined his current company and specialised in the residential property development sector.</p>	20:03	3515

The interviewer was solving for saturation of the data and from a total of ten interviews that were scheduled and conducted over a course of four weeks, the first seven interviews revealed new and valuable themes, which were relevant to this research. From interview eight the emergence of new themes declined in such a way that saturation was reached and therefore the balance of the interviews were completed to confirm saturation.

From the ten interviews that were conducted, four of the participants were known to the interviewer prior to the interviews. The interviews were necessarily conducted in a professional manner to insure that the known relationship with the participants did not influence the results. All the participants shared their information and experiences willingly, while a Non-Disclosure Agreement (NDA) had to be signed with Developer 7 due to the sharing of sensitive



information. The interviews and sharing of the participants’ experiences led to the collection of a valuable data sample.

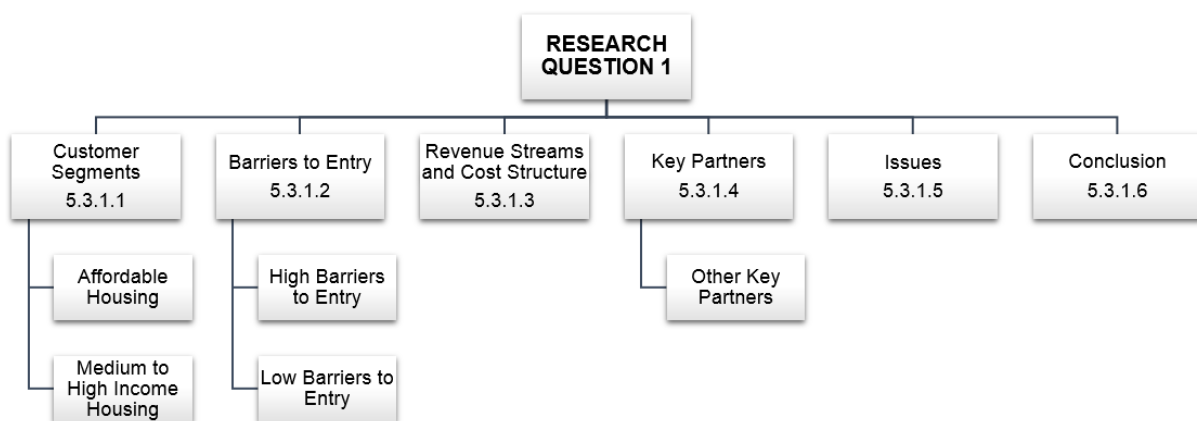
### 5.3 Results

This section discusses the findings from the ten interviews and is organised according to the themes that emerged. The themes are grouped according to the research questions from Chapter 3. The discussions in the semi-structured interviews covered all the themes being tested. For the purpose and quality of this report, the most relevant three of four quotations were used per theme.

#### 5.3.1 RESEARCH QUESTION 1

**What role do financial institutions play in the success of residential property developers’ businesses?**

**Figure 8: Taxonomy of research question 1**



##### 5.3.1.1 Customer segments

The RPDs that were interviewed focused on various markets. The markets included affordable housing, medium to high income housing, mixed use developments and retirement villages. The residential business models differed with respect to the cost structures of their projects. The affordable housing developers focused more on quantity and the medium to high income residential developers focused more on quality and extras. Therefore the affordable housing developers make a small margin on each house or unit, but their developments normally range from 100 houses up to 15000 houses per project. So they generate their profit from the number

of units they have in their developments. The houses that they construct are very small compared to the higher income market. The medium to high income residential developers have a much higher margin per house that they sell, but sell in smaller quantities compared to the affordable houses. There is a large differentiating factor in building type and style when it comes to the various RPDs.

The customers that these residential developers target are therefore different depending on which market they are covering. The affordable housing market consist mainly of first-time buyers and young families with a combined income of approximately R19 000 per month.

#### Affordable housing:

- *“So the targeted individuals or families are basically young, sort of your out of university, new job or people who have just started maybe a small family, ja, but largely it is also dictated by my finance conditions, in the sense that it cannot be people who earn more than Nineteen thousand Rand per month...” Developer 2*
- *“...we focus on first time home buyers exclusively. And with our social caps on we sell purely to first time home buyers – no investors... and their income level is anything from about R17000 a month and up.” Developer 3*
- *“It is mostly first time buyers, in fact 90% of our customers are first time buyers. We target the market who earns just less than R20 000 per month.” Developer 5*

#### Medium to high income housing:

- *“And then at the equestrian estate it is more a variety, it is just very wealthy people, most of these people buy their properties cash because it is too expensive to fund it anyway.” Developer 1*
- *“So now I think Pretoria a three bedroom will let first; in Joburg the two bedroom or the one bedrooms. All and there are four bedrooms left! It is just location!” Developer 8*

Developer 8 mentioned that his market is changing to leasing market rather than a buying market and this has changed his cost structure completely, since they now have to absorb large costs upfront and recover them over time. This is not only in the medium to high income housing, but also in affordable housing as Developer 2 and Developer 5 mentioned:

- *“...currently we target the affordable housing space, so with a view to rent out the properties, so it’s also informed by the way we have structured the financing for our developments...” Developer 2*
- *“We therefore amended our model a bit, so now we work on a 70/30 basis...we sell off 70% of the development... then keep 30% of the houses as rental stock.” Developer 5*

Developer 8 and Developer 9 further explained how the market has changed their business model:

- *“So we used to be only sales, and in the last three years we have swapped to 90% of our business now letting.” Developer 8*
- *“Currently our model, we operate in four categories – affordable housing...Then conventional town houses that we sell off...Then rental stock: we like affordable rental stock...And then retirement villages. That is full ownership, life rights...” Developer 9*

All the participants have explained how their business models change the way their financing is structured and how much debt they require depending on whether they sell their development or lease it. The developers also differentiated their customers with regards to their preferences. The affordable housing market prefers single free-standing small houses, then the medium income market, prefers high density walk-up units, whereas the high-income market prefers free-standing large houses.

- *“It is also very true that our market prefers free standing houses...” Developer 3*
- *“Just sectional title... we do high density sectional title four story walk-ups, that’s how focused we are.” Developer 7*

With regards to the size of the different housing models, affordable housing is normally in the range of 40m<sup>2</sup> to 70m<sup>2</sup>. The high density walk-up units range between 70m<sup>2</sup> and 130m<sup>2</sup>. Then the normal free standing high income houses range from 130m<sup>2</sup> and up.

- *“...40 square metres, 2 bedrooms – that’s our smallest unit.” Developer 3*
- *“We have three types of units...45m<sup>2</sup>, two bedroom one bathroom...55m<sup>2</sup>, three bedroom one bathroom...67m<sup>2</sup>, three bedroom two bathroom en-suite...” Developer 6*
- *“...ground floor three bedroom with a garden for the families...above that we have three bedroom, depending on where the market...price point driven,” Developer 7*
- *“...average is 55 to 60 squares...larger two bedroom or a smaller three bedroom.” Developer 9*

### 5.3.1.2 Barriers to entry

The residential property market is a very tough market to enter. From all the participants that were interviewed, nine out of the ten participants stated that the barriers to entry are very high due to the large upfront financial investments required.

#### High barriers to entry:

- *“Very high. There are lots of reasons for that: unavailability of land, the difficulty to get listed on the banks’ panels as a developer. It’s very difficult.” Developer 3*
- *“It is tough to enter because you need a lot of money.” Developer 4*
- *“Yes very high...struggle to obtain funding from the financial institutions.” Developer 5*
- *Ja, it is more or less impossible, without big capital.” Developer 9*

#### Low barriers to entry:

- *“Ja, I think so. If you have the drive you will be able to enter. There are always opportunities.” Developer 8*

**Table 2: Barriers to entry**

Participant	High Barriers to Entry	Low Barriers to Entry
Developer 1	√	
Developer 2	√	
Developer 3	√	
Developer 4	√	
Developer 5	√	
Developer 6	√	
Developer 7	√	
Developer 8		√
Developer 9	√	
Developer 10	√	
<b>Frequency:</b>	9	1

Therefore with a 90% level of confidence, the barriers to enter the residential market, regardless of the segment, is very high. This is mainly due to the large financial investment that is required.

### 5.3.1.3 Revenue Streams and cost structure

As mentioned previously the cost structure is highly dependent on the residential property model the developer focusses on. Leasing models have a long-term view to recover all the initial costs and make a profit, while selling models are built around a quick turnover. Unfortunately for these developers, the market determines whether it is a “selling cycle” or a “leasing cycle”. During the property “bust” cycles or economic downturns, the market is more likely to lease houses and during a property “boom” or a strong economic outlook, the market is more likely to buy houses. During these property “booms”, cash flow is normally not a problem, because the RPDs sell their houses/units fast and recover their money very quickly to invest into the next project. But during economic downturns when the market reverts to leasing rather than buying, cash flow becomes a problem for most developers. With leasing structures, developers’ money becomes locked up into the development. This restricts money being available for another upcoming project.

- *“But the problem there is that you have to have a big balance sheet and you have to have good cash flow in order to do it.” Developer 1*
- *“...if you look at your main property developers, most of them are listed and others have been in the game for a long time, so cash is not the issue.” Developer 2*
- *“Yes, cash flow was a major issue throughout the years... We had to build up extremely good relationships with the financial institutions.” Developer 5*

Developer 5 made it very clear that it was almost impossible to complete a housing development without the assistance of financial institutions, unless they completely changed the project.

### 5.3.1.4 Key partners

The participants made it very clear that financial institutions still play a major role as a key partner in residential property developments. Without large financial investment partners, residential property development becomes extremely difficult. Bulk contribution payments for services are too expensive to cover upfront, since they run into the million rand figures.

- *“Ja, sorry, so it is access to stands, but also capital; the more capital you have the easier it is for you to take these decisions” Developer 1*
- *“So the relationship with the banks is obviously very important at the end of the day if you can get finance from a bank then we can sign a contract.” Developer 4*

- *“The banks, we couldn’t do it without the banks... Development finance, top structure finance, land finance, it is very difficult for a developer now because they don’t fund land, they fund us on land if we ask them, they will fund us fifty percent.” Developer 7*

The relationships with the financial institutions become twofold. Unfortunately, the relationship between the property developers and the financial institutions can be healthy and a development can still struggle to sell. If the market is not fit for selling and the banks have lost confidence in the buyers, then no personal bonds are approved either. This is the situation as referred to earlier where the developer had to instantly change his model to a leasing model.

- *“So that caused a lot of people to not qualify for bank bonds...fortunately there were institutions like the Home Loan Guarantee company...that issued guarantees, for the shortfall that people had at that point in time, in order to qualify.” Developer 1*
- *“Ja, especially our national economic environment is very hard now, and that will be a threat to the end user financing institutions and to the buyers as well...political-wise and economic-wise.” Developer 3*
- *“Ja, I think the property boom, or the property crash in the late 2000s, I think most of the other developers in SA, I think everybody came to a standstill because banks were basically withdrawing bonds so there were no bonds approved.” Developer 10*

Another innovative technique used by Developer 9, was to change the size of the stands and houses and sell them for cheaper. By doing this, more people qualified for bonds from the banks.

- *“...after the financial crisis we actually went back to the drawing...We made the stands smaller and actually built the same house for up to 40% less...So drop stand prices, strip the spec and halved our margins.” Developer 9*
- *“So out of the 2008 Global Financial Crises we actually created 3 brand new business models in residential property development.” Developer 9*

Developer 2 further explained how he leveraged of other key partners like his architect and quantity surveyor to build relationships with financial institutions. As a new entrant into the market he explained how tough it was to obtain finance from financial institutions and had to build up relationships through his networks.

- *“...your architects and electrical engineers, these are guys who work with quite a number of other companies...leveraging off their relationships, they work with a lot of banks and a lot of other funders.” Developer 2*
- *“We do, look without the banks we don’t have a business because if we don’t get bonds for our products we don’t have anything to sell...so if they don’t sign valuations on our projects and can’t give us valuations it means we don’t have money.” Developer 10*

The majority of affordable housing developers explained how their market is extremely price sensitive and that they could not mark their units up too much, because their customers would not be able to qualify for a bond.

The participants laid emphasis on the importance of funding and explained that a project cannot proceed without funding from the banks.

- *“If you don’t have funding nothing happens.” Developer 1*
- *“Ja, definitely. Ja, without end user funding and without commercial funding, you will not succeed.” Developer 9*

#### Other key partners:

The participants further mentioned some of the other key partners in their projects which included development partners, township developers specifically servicing land, Transnet Housing, construction teams and professional teams.

- *“...we have got a number of development partners, which means that these guys are always competing internally with each other, and they are looking at innovative ways of developing in the future.” Developer 1*
- *“Okay in our business, all our professional teams and our contractors are people who have been working with us for years. Some of them thirty plus years, so everyone understands our business and how we need things to be done.” Developer 6*
- *“...we couldn’t do it without the attorneys, the professionals, I think one of the big keys in our business is the architectural side and I think teaming up with good architects is an absolute must...” Developer 7*

The majority of participants mentioned that their entire professional team was important but that they could not commence with any project without obtaining the finance first. The financial institutions are therefore the number one key partner in RPDs’ business model.

### **5.3.1.5 Issues**

The two biggest issues that influence the relationship between the RPDs and the financial institutions were the international credit downgrade and the political situation in South Africa. The participants argue that these two factors have deterred business and slowed developments down due to the lack of financing on projects. The political and economic risk are issues that are very common to most African countries. African countries struggle with totalitarian rule and corrupt governments. Foreign investors take note of these issues and refuse to invest in South Africa's property sector, until the political and economic situation improves.

### **5.3.1.6 Conclusion**

Financial institutions still form an integral part of the residential property development industry. Without financial institutions providing funding to RPDs, the industry would come to a halt and this would be a catastrophe for the government and Gauteng's housing shortage. RPDs therefore require healthy working relationships with the financial institutions in order to build a successful business. Financial institutions therefore play a critical role in the success of RPDs' businesses.

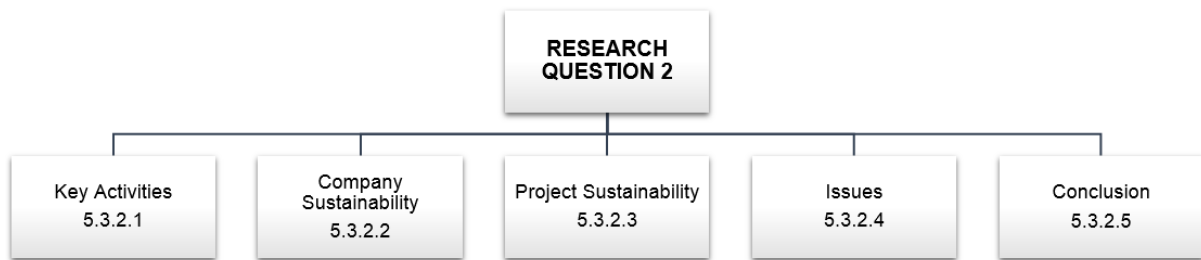
## **5.3.2 RESEARCH QUESTION 2**

**How has the concept of sustainability influenced the formulation of residential property developers' business models?**

To address the sustainability of RPDs' business models, this section will first discuss the activities these developers view as being significant in their business. From these key activities, the focus of these developers can be determined. Sustainability will then be discussed in two sections. Company sustainability will be addressed first and provide a better understanding of the activities that contribute to the future of their business. A discussion on project sustainability will then follow to understand the measures put in place to ensure the sustainability of each project and how developers integrate various methods to ensure the sustainability of each development.



**Figure 9: Taxonomy of research question 2**



### 5.3.2.1 Key activities

The key activities refer to the activities that contributed the greatest amount of value to the company. This included brand awareness, marketing and sales, design and packaging of the product, execution and delivery of the product, pricing and doing research on the market.

- *“...brand awareness for the business...people will buy a product because of the brand but the brand has to be backed up like I said to you earlier with service.” Developer 7*

Developer 7 explained the concept of brand awareness in the property development industry. He stated that his company has continuously offered quality housing over the years and now their houses are in demand, because people know exactly what they can expect when buying these houses. The company has built a unique brand and the people associate their houses with the company’s name, which enables them to sell their projects before they even start constructing them, since most people already know how their houses look inside and outside.

The design and packaging were discussed by a couple of the participants and they explained that it focuses on the style, extras within the houses/units and sizes of the houses/units. This is the technique used for differentiating and marketing the products to the public.

- *“...we try to give him a nice flat for a fair value which we believe is the more important thing, and it is not only about making money.” Developer 4*
- *“Then selling the right product. This is regards to size, features of the units and price.” Developer 5*
- *“We design and build and market everything is in house...all the components of the development are in house is I would say the biggest factor of success.” Developer 8*

After packaging the entire project, it must still be sold to the market, so most of the participants discussed the importance of a good selling/marketing strategy. A couple of the developers stated that marketing is the most important activity within a residential development company.

- *“Selling of houses, marketing of houses – ja, that’s our main focus.” Developer 3*
- *“First of all marketing and sales, which probably forms the most important role in the company” Developer 5*
- *“...you need to spend a lot of effort in marketing because obviously if there are no sales there is no business.” Developer 6*
- *“Ja. Marketing definitely, and the fact that we are marketing orientated development company helps.” Developer 8*

Marketing stood out amongst the participants and was easily the second most discussed topic after financing a project and the relationships developers required with financial institutions. The combination between marketing and financing of the project, brought about the pricing of the houses/units. If the pricing was too high, the majority of customers do not qualify for bonds and if the pricing was too low, then it would not be feasible to commence with the project and the developer carries all the risk.

- *“It’s a combination but mainly at the end of the day to give a guy a product at a fair price you know.” Developer 4*
- *“So I think the market that we are operating in is obviously a big contributor, so the price range is I think key, number one.” Developer 7*

It is therefore an imperative function of RPDs to understand their market and conduct sufficient research into the market before they package a product within a specific geographical location, due to the change in demographics and household income.

- *“...need to understand the market...it doesn’t help a guy to go and try and build ten thousand houses in Witbank, you won’t have a market share there” Developer 6*

**Figure 10: Key activities for residential property developers**



Source: Researcher's own representation

### 5.3.2.2 Company sustainability

During tough economic times, sustainability becomes a major contributor to a company's success. The participants explained how they changed their business models to become more sustainable during the tougher times. When the global financial crises occurred, most companies were not geared for the market collapsing and subsequently had to close their businesses. Also, the participants have explained how the Gauteng city councils have delayed their projects due to incompetence and how they had to put measures in place to cater for these circumstances.

- *“And then to look at new business: there is always a lead time to get something done. So we spend time on new business as well.” Developer 1*
- *“We have more than one project running at the same time...So we try and pre-empt what areas are going to grow and then we buy land in those areas...So we plan five years in advance.” Developer 8*

To survive through the tougher economic times, the participants mentioned how they built their brands and successful track records to ensure continued future business.

- *“No track record, very difficult.” Developer 2*
- *“A proven track record is critical.” Developer 7*

In order to build a good track record, these developers had to supply a quality product in the past. Quality in previous projects become a differentiating factor, especially during the tougher times. Quality products build brand awareness.

- *“Ja, and then the second thing is always wanting to deliver more to the client. So exchange of abundance.” Developer 8*
- *“Well if you look at what is in the market everything looks the same. (laughs) We believe...our units are the best quality.” Developer 10*

Developer 10 mentioned how they employ external experts to monitor the units. This links in with the after-sales service they provide, adding to the sustainability of the company. Good after-sales service, contributes to the marketing of the developers' next project through word of mouth. The participants explained how customers tend to refer their family, friends and colleagues to buy from the same property developers if they had a pleasant buying experience.

- *“And service. Especially after sales service. First time home buyers, so we have to educate them through the whole process. Not that they are uneducated...they want to be informed on every step of this process, otherwise ‘who next, how do I do this, where must I sign these documents’, so that is education as well.” Developer 3*
- *“Obviously all the nice to haves must add onto that, aftersales service, all those things must happen and then I think you are pretty much there.” Developer 7*

Developer 2 emphasised how important networking has been for him to start his residential property business during tough economic times. Some of the other participants shared his view on networking to create sustainability within their companies.

- *“I think it was about five years ago, I started networking with people...your architects and electrical engineers...very good source of potential deals” Developer 2*
- *“And also because we are such a small company we work with a handpicked bunch of consultants that we have built relationships with over the last 30 years.” Developer 10*

### 5.3.2.3 Project sustainability

For specific projects to be sustainable, the participants mentioned how the residents of a new township require access to basic services and infrastructure. Mixed use developments would be preferable, but not all developments are feasible when considering a mixed use development. This is taking into consideration the price paid for the land, the number of studies that had to be done in order to develop the township and any other factors that could influence the customer price being paid per unit. Developers would therefore study the area and incorporate the design of the residential township with the surrounding areas to increase the sustainability of the project. RPDs consider the amount of schools, shops and other public facilities in an area, before they make an offer on the property. All these public amenities increase the sustainability of a project.

The first sustainability factor is access to places of work and public transport facilities.

- *“...lower end of the market, location you can get away with but then you need transport routes and other infrastructure like schools and so on, Ja, so it is the accessibility, safety and the convenience. We call it live, work and play.” Developer 1*
- *“...it is very close to the CBD and what that means is the transport network is also very good and...close to the Gautrain station as well.” Developer 2*

The second sustainability factor is convenience.

Developer 1 has already mentioned convenience in his quote on accessibility and transport:

- *“Ja, so it is the accessibility, safety and the convenience.” Developer 1*
- *“...because of the convenience factor, so it is sort of removed from the CBD but the CBD is right there” Developer 2*

The third sustainability factor is recreational facilities.

- *“...two minute walk and there is a park nearby so you have got recreational stuff, educational, you have got retail...” Developer 2*

The fourth sustainability factor is security. The security factor is more aimed at the higher LSM groups like the medium and high income housing projects.

- *“Well sorry, firstly it is because of security. Our research shows that our LSM or our target market is very security-sensitive” Developer 1*
- *“...he or she will always want a place to stay that is convenient, well managed, safe” Developer 2*

The fifth sustainability factor is location. Location is almost the overarching factor. Due to the accessibility, public transport, convenience and recreational facilities, the location becomes suitable for a sustainable residential development.

- *“...if you play in the very high LSM market then the land price is not that important but the location is even more important... people don’t want to struggle to get to their place of work.” Developer 1*
- *“...think our units it’s the location, definitely the location, it is very close to the CBD...proximity to amenities...” Developer 2*

The participants also discussed ways of creating an environment for self-sustainability in a new residential development. This enabled the participants to look at new innovative ways of structuring their cost structure as well.

- *“...if you use seventy to eighty percent local labour...if you want to do extensions or tiles or burglar bars or whatever, here are the local people that we have utilised, so you create almost a little economic hub afterwards for the local people...we don’t give optional extras...the local guys can get involved and get the work...” Developer 6*

Through the use of local labour and building their business plan around the needs of the community, Developer 6 has created an environment of sustainability. Developer 7 has a similar approach to using local people and upskilling them to become employed by the company.

- *“...company foundation and in that foundation we are upskilling people...it’s to give back to the community but...we would like to skill some people that can come and work for us and give them a job, tilers, plumbers, painters” Developer 7*

Then the last factor relates to environmentally friendly sustainability.

- *“They are looking at solar street lights instead of electricity, and LED, even in the houses, etc.” Developer 1*

#### **5.3.2.4 Issues**

There are two issues that were raised by the participants with regards to sustainability in their business models. The first issue was the declining customer base. Due to the financial institutions losing confidence in the residential market, customers are really struggling to obtain bonds. This makes it extremely difficult to plan developments ahead, because as a residential developer they are not even sure whether they will be able to sell all their houses/units within a project. The tough economic times caused many people to lose their jobs and are in no position to pay for a bond anymore. The second issue lies with the RPDs themselves. The issue of not diversifying their products. Delivering the same product throughout all the years and not changing their business model as the trends change in the residential market.

#### **5.3.2.5 Conclusion**

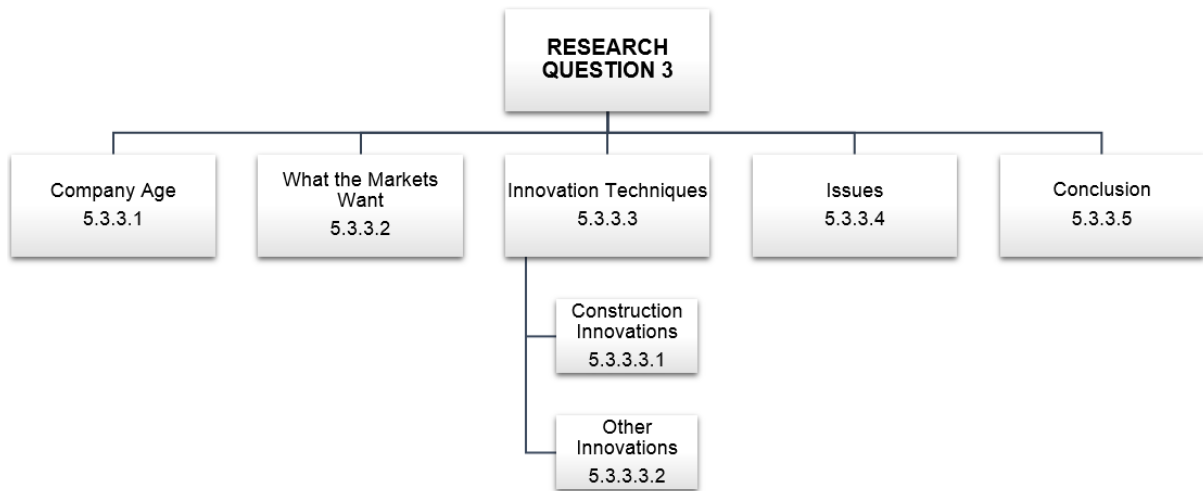
From the models and techniques that the participants have, it is very clear that sustainability is a major contributor to their business models. Some of these RPDs have changed their business models completely to include sustainability into their projects. From company sustainability to project sustainability, it is definitely a large consideration during the formulation of RPDs' business models. Some of these participants mentioned that it has paid off tremendously to include sustainability within their business models.

### **5.3.3 RESEARCH QUESTION 3**

#### **How do residential property developers innovate their business models?**

This question will be approached with regards to three sections before discussing the issues. The first section will address the age of the companies to determine how long these companies have been in existence. This is to give an idea whether these RPDs have had to innovate their business models to survive. The second section will look at the market needs. In order to innovate a business model, the developers will first need to understand their market. The last section will address the various innovation techniques being used by the ten participants.

**Figure 11: Taxonomy of research question 3**



### 5.3.3.1 Company age

**Table 3: Age of all the companies**

Participant	Company Age (in years)
Developer 1	9
Developer 2	3.5
Developer 3	24
Developer 4	21
Developer 5	21
Developer 6	75
Developer 7	21
Developer 8	14
Developer 9	25
Developer 10	30

The majority of the residential development companies are more than 20 years old, with only one company less than 5 years old. There is enough experience within these firms to discuss their business model innovation techniques since the residential property market has changed significantly over the past 20 years, as most of the participants have told the researcher. The average age between all of these companies is 24.35 years. If the two outliers of 3.5 years and 75 years are removed, the average age is 20.63 years.



### 5.3.3.2 What the market wants

The researcher first needed to understand what the participants thought the market conditions were. Whether there was a decrease or an increase in the last couple of years.

- *“I think it is a bit more insecure, just because of our political / economic environment which is a bit in shambles, both of them.” Developer 3*
- *“it has been more difficult than previous years.” Developer 5*
- *“...I would say it declined and we measure it in sales...” Developer 6*

**Table 4: Current market conditions**

Participant	Market Increase	Market Decrease
Developer 1		√
Developer 2		√
Developer 3		√
Developer 4	√	
Developer 5		√
Developer 6		√
Developer 7		√
Developer 8		√
Developer 9		√
Developer 10		√
<b>Frequency:</b>	1	9

Therefore with a 90% level of confidence, the residential property market, regardless of the segment, has decreased over the last couple of years. This is mainly due to the global financial crisis and the banks losing confidence in the residential market.

In order to understand what the market wants, a look at the historical trends in the residential market will indicate how RPDs have previously had to change their business models.

- *“...we spend a lot of time with the banks to ensure that we know what is required from the bank. Our whole process initially was handwritten, completed application forms; today everything electronic. You can gather information of your potential buyers also at a much quicker rate.” Developer 1*

- "...he or she will always want a place to stay that is convenient, well managed, safe, so I think that sort of hedges against the change in the trends which you experience in the more premium properties." Developer 2
- "Well the rental component was a definite change in the market. This entailed the migration from full title to sectional title." Developer 5
- "Over the years what's happened is that as things have become more expensive and land more difficult to come by, the densities have had to increase" Developer 7
- "So we used to be only sales, and in the last three years we have swapped to 90% of our business now letting. Mostly due to the market changing." Developer 8
- "In that same period we quickly realised that conventional townhouses hit the wall...within six months did market research on retirement villages, understood what the real needs are...applied the skills in retirement village space." Developer 9

**Table 5: Residential market trends**

<b>Change from:</b>	<b>Change to:</b>
No security	High security, especially with estate living
Hand written bank process	Electronic bank process
Standard design of house	Environmentally friendly design
Full title	Sectional title
Buying	Renting
Old people buying houses	Young people buying houses
Low density developments	High density developments
Large stands with a house	Smaller stand with the same size house
Conventional townhouses	Retirement villages
Normal sized affordable housing	Mega-projects (+10 000 units)

Most of the participants mentioned the change in the market from a buyers' market to a rental market. This is mostly due to the customers not obtaining bonds from the banks, as mentioned earlier.

- "...a view to rent out the properties... but the nice thing about the rental space is that you sort of take a long term view" Developer 2
- "People are unsecure at the moment, then they start leasing, rather than buying..." Developer 8
- "Then rental stock: we like affordable rental stock..." Developer 9

Then if we look at how the market has changed in more recent years in terms of estate living, the market has gone from normal residential estates, to golf estates, to mixed use estates and finally the new trend is lifestyle estates. Mixed use and lifestyle are most definitely the preferable trends in residential development at the moment.

- *“...really people want lifestyle estates now and again if you look at the model of the lifestyle estate, it is all about convenience.” Developer 2*
- *“So what we do on our developments obviously as the developments get bigger so does your lifestyle, so the lifestyle is important...they have got a restaurant, a gym, a spa, swimming pools, laundromat, the whole thing...” Developer 7*
- *“So we concentrate on a lifestyle...So there are restaurants, swimming pools, little soccer fields, mini soccer fields, we put play areas in. Most have a little skate park, most have a pool.” Developer 8*

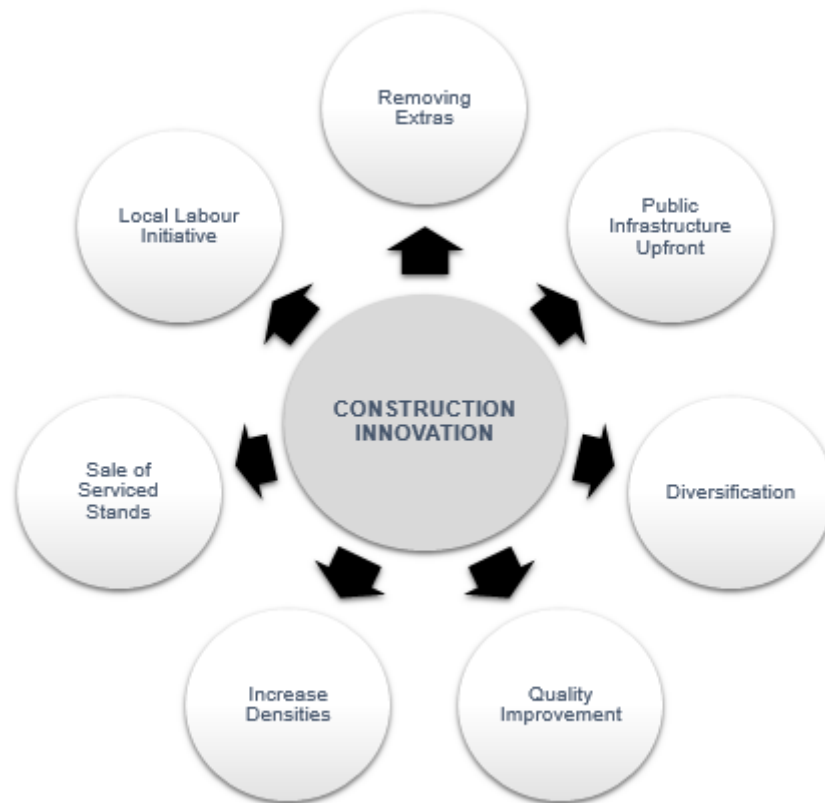
People have become accustomed to having everything in close proximity to their homes. Restaurants, schools, gyms, pools, parks and sports fields. The trend is basically the creation of small self-sufficient hubs within a city.

### **5.3.3.3 Innovation techniques**

This section will be dealt with under two types of innovations. The first innovation subcategory is construction innovation and highlights all the innovations these RPDs introduced to minimise construction costs effectively and increase their sales. The second subcategory relates to all other innovations within the business model. These include innovations involved with the selling techniques to information technology.

### 5.3.3.3.1 Construction innovations

**Figure 12: Construction innovations**



Source: Researcher's own representation

#### Cutting down on "extras" costs:

- "...new trends that they see coming along, how to minimise cost of building and all those things..." Developer 2
- "With our product is that we sell a basic house...local guys can get involved and get the work to put in boundary walls, put in tiles, whatever the clients need." Developer 6
- "We also tried to fix the costing with our suppliers." Developer 6

Developer 6 explained how he constructs a "shell" and then the local labourers can add the extras. By doing this he sells his units for up to R50 000 cheaper than his closest competitor and he provides jobs to the local residents. In general his market is not too phased about extras up front. Developer 6 recons this is something his market is happy to add over time. But for a R50 000 cheaper price, this has worked extremely well for him. Developer 1 and Developer 9 did something similar to this approach.

- *“...people qualified for a 55 square metre house, they suddenly only qualified for a 40 square metre house. So we built smaller houses...” Developer 1*
- *“We made the stands smaller and actually built the same house for up to 40% less or sold it for 40% less.” Developer 9*

Developer 9 therefore decreased the stand sizes in his developments to drive down the costs and kept the house sizes the same. He also stripped the houses of all the unnecessary extras. By doing this he was able to include more stands within a given development. He quickly realised that his market is purely interested in the size of the house and the size of the property did not influence their decisions to such an extent that they would not buy the house anymore.

#### Building public infrastructure upfront:

Developer 1 further explained how important it was to build the infrastructure upfront. Seeing is believing. He stated that they are still struggling to sell units in the developments where they promised to build infrastructure such as schools and shops, but it only forms part of the last phase of construction. But with the developments where they built the boundary wall, hospital and school first, they sold all the residential stands immediately. Developer 1 changed their business plan around completely. Where it was the norm to construct and sell the residential stands first and build up enough money to construct the public amenities, they sunk a large cost to first construct the public infrastructure and then construct and sell the residential stands.

- *“...if you put in proper infrastructure, then people buy. You mustn't tell them off plan that you will build a clubhouse and a gate house and the world and so on, and then it comes much later. Then people don't trust you. If you put in all of that infrastructure right from the start and it is almost finished by the time the people start building, it just sells so much easier.” Developer 1*

#### Diversification:

Diversification seems to be one of the biggest amendments these participants have made to their business models. Most of the participants were focused on one specific market, but changed their business model to include three to even four different markets.

- *“I want to actually get into opportunities where I develop to sell rather than to develop to rent only.” Developer 2*

Developer 2 has not been in the residential property business for too long, but he has already realised that he needs to diversify by changing his business model to rentals and selling, rather than just rentals.

- *“You know we are trying to migrate to a bit of a higher market...from R600K to R700K is the category we operate in but we feel we could move from R700K to a Million Rand, we want to also target that side of the market.” Developer 4*
- *“We used to do purely full title affordable houses, but the market has changed and most people are not that interested in full title houses any more...now we work on a 70/30 basis...we sell off 70% of the development as full title houses and then keep 30% of the houses as rental stock.” Developer 5*

Developer 4 and Developer 5 both diversified their models into two segments. This is mostly due to the changing market as Developer 5 explains. But both participants now focus on selling and leasing.

- *“We have tried the leasing, we have tried offices, we have tried shopping centres, we have tried hotels, we have tried clusters, free hold homes and what came out of all of that in the last twenty one years is focus on the product that you know...” Developer 7*

Developer 7 has a different approach to diversification. Their business model started out as a diversified model within residential property; then they realised that they were not geared for such diversification and simplified their business model to include high density walk-up residential buildings. They now only focus on implementing this business model to the best possible standards. They do however diversify with regards to segment and cater for young individuals as well as families.

- *“so if you look at our block we cater for everything, we cater for the cheap units, but affordable units that people can move into, one bedroom for a couple, people sharing, for a new family two bedroom, two bathroom and then obviously the three bedroom is for a family and then a dog.” Developer 7*
- *“We have got what I refer to as the sausage factory, so every site we have a block that gets built we say to the guys, that is the block, build that block and off they go and they are very good at copying...it’s a production line.” Developer 7*

What Developer 7 has done differently, is to create the production line of housing. This is a major innovation for housing in Gauteng, especially with the housing shortage that Gauteng currently has. Developer 7 is able to roll out their units much faster than any other RPD, while adhering to all the quality standards and providing excellent after-sales service.

- *“...go from affordable housing to conventional housing; that was let’s say the first time we ventured into a different business model.” Developer 9*
- *“Meaning new affordable housing...the retirement business, and then rentals...forced us to be creative and play in these niche markets.” Developer 9*

Developer 9 changed his business model completely from the one segment approach and now covers various markets and segments. He develops affordable housing, conventional housing, retirement villages and he opened a new section where they do property management as well.

The next big innovation within Developer 9’s business model, integrates the medium to high income model with his affordable housing model. Developer 9 argues that the affordable housing developers have implemented the same model for too long and an innovation in that market is due. Developer 9 is going to introduce infrastructure like guardhouses, clubhouses and basic security features within his affordable housing models to reflect the image of a medium to high income lifestyle estate. He stated that everyone wants lifestyle, it does not matter in which market you operate. It is purely about the feasibility of the project and how you finance it. Affordable housing developers normally avoid additional features to a development because it is not feasible to include them, but Developer 9 says the true innovation lies in the funding of these lifestyle features within an affordable housing development.

- *“So exactly what the upper end developers did right on creating lifestyle and then basically your product you know, take a pace from there, and make sure you do it in your entry level model as well.” Developer 9*

Developer 10 explained how they diversified their business model with regards to various residential segments as well as other uses, like retail and business. They did this in order to lower their risk during the bad economic times. Developer 10 even diversified their residential sector into three segments.

- *“Ja, and also I think because we diversified...purely because we don’t just do residential, we do retail and medium to high income housing as well.” Developer 10*

- *“The one is give away to beneficiaries, then we have a rental option, where we keep those units and rent them out ourselves. In terms of the first league of units that is sold on the open market.” Developer 10*

#### Quality Improvement:

This section is not really a business model innovation, but refers more to product innovation. But the researcher felt it was necessary to mention the product quality improvement, because it does create an advantage over the competitors in the market.

- *“I improved the product a little bit, try and improve the product to make it aesthetically better...we trying to look at our product and just better it all the time...” Developer 4*
- *“The first thing is quality, people recognise quality and they recognise after sales service okay, so that takes years of hard work to get that right...” Developer 7*

#### Increase densities:

Density increase has been an old trend in the residential industry, but the innovation comes from the way in which densities are increased. Especially international examples of how densities increase to multiple storey residential building, while creating lifestyle features within them.

- *“...we do high density sectional title four story walk-ups...” Developer 7*
- *“...we provide fully subsidised housing in the form of multi-storey walk up units...So it goes along with the densification of areas...” Developer 10*

#### Local labour initiative:

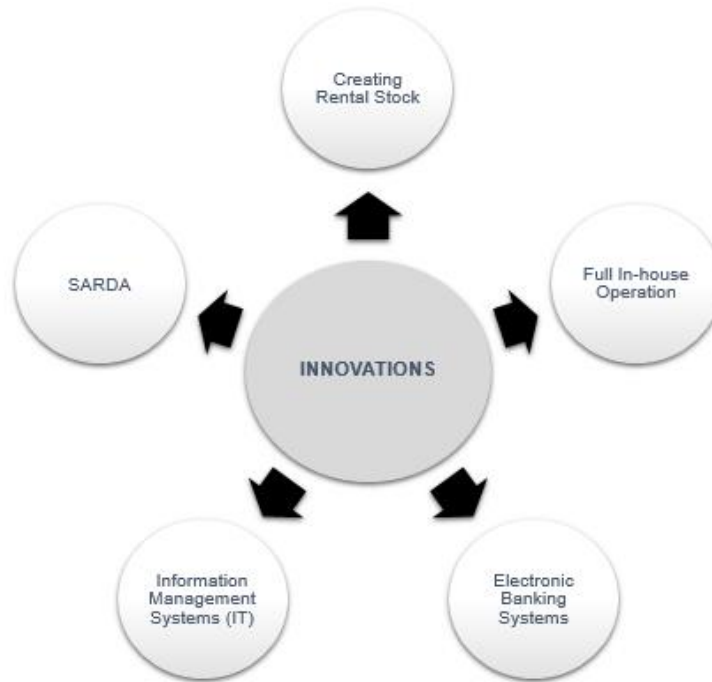
The innovative changes in the residential construction of houses, have had a positive effect on communities. Not only is there an emergence of new housing opportunities, but also the creation of jobs in the communities.

- *“...if you use seventy to eighty percent local labour...” Developer 6*
- *“...we have just implemented a year ago is the company foundation and in that foundation we are upskilling people...skill some more people that can come and work for us and give them a job, tilers, plumbers, painters...” Developer 7*



### 5.3.3.3.2 Other innovations

**Figure 13: More innovations**



Source: Researcher's own representation

#### Creating rental stock:

The first innovation discussed under this section relates to the economic downturn and people struggling to obtain bonds. This is where the majority of these RPDs have started with rental housing as well. They are creating rental portfolios as part of their business models.

- *"The higher end of the market today, the guys - and even the lower end of the market - the guys are more and more looking at creating rental stock..." Developer 1*
- *"...but the nice thing about the rental space is that you sort of take a long term view...you are going to have a bit of capital appreciation..." Developer 2*

#### A full in-house operation:

This refers mostly to closed innovation and companies trying to keep everything within the company itself to save on costs.

- *“We design and build and market everything is in house...all the components of the development are in house is I would say the biggest factor of success.” Developer 8*
- *“Business needs, and basically driving the project management yourself. If you just rely on consultants, including your engineers, you will not succeed.” Developer 9*
- *“So I would say the whole turnkey approach; you do everything yourself, with hands on consultants. So from your procurement...we do rental management, property management, estate management.” Developer 9*

Various RPDs differ on this view. For some of them the costs are too large to do everything themselves and they do not want the large staff component because it is hard to keep them busy during the tough times when residential development is low. Developer 9 argues that he does not have to share his profit with another subcontractor due to outsourcing and that is where he benefits from doing everything in-house.

#### Electronic banking systems:

This in itself has been a large innovation for RPDs. This may have not been a direct innovation within their business models, but it did serve as an external innovation with large benefits to the RPDs' business. The electronic banking system decreased the amount of time on administrative processes of applications for funding at the banks and it also provided the RPDs with valuable information on possible customers. They were in a position to identify possible customers much faster to speed up the purchasing process.

- *“Our whole process initially was handwritten, completed application forms; today everything is electronic...You can gather information of your potential buyers also at a much quicker rate.” Developer 1*

#### Information management systems (IT):

Adding to the electronic systems, are the RPDs' own information management systems where they can capture all the relevant information on their customers and residents. Some of these information systems (as discussed below), are interactive systems, where new residents can report problems on building infrastructure or maintenance. This provides a whole new spectrum to information about customers and what the market wants.

- *“...our AT systems, the information technology, because if you have such vast numbers of people that are involved in the process, you need to have a proper*

*information management system...it provides us with information real time on what is going on in our development.” Developer 1*

- *“We have got an estate app that also provides us with information...” Developer 1*
- *“...it takes you onto our webpage, you can actually do it through our company App, you can buy electricity and all of that and you can go into the snagging, so you register your unit and when you go into snagging it automatically fills in the information for you...Very good system, something we designed ourselves because there isn't anything like that in the market and it's worked wonders for us.” Developer 7*

Developer 7 has definitely become a trend setter with this information technology system, which will most likely become the norm in a couple of years.

#### The South African Residential Developers' Association:

This innovation was born from the struggle with city councils. This does however relate more to a process innovation than a business model innovation, but the researcher wanted to include this in the discussion as a solution to a problem that RPDs face in Gauteng. A number of RPDs registered on the South African Residential Developers' Association (SARDA), with the idea of solving issues within councils due the incompetence of specific council employees that did not understand the processes and procedures of township establishment and services installations.

- *“...we formed an association of all developers, called SARDA, South African Residential Developers' Association, to act as a mouthpiece for developers to speak to the local councils, to speak to the environmental authorities...” Developer 3*
- *“Then there was an authority established among all the developers known as SARDA... resolve most of these issues at the councils.” Developer 6*

#### **5.3.3.4 Issues**

The issue that became prevalent among the RPDs, was the comfort zone. During the property boom and strong economic times, RPDs became too comfortable with their simplified business models with singular housing typologies, since business was good and there was no need to be innovative and diversify. As explained by the participants this comfort zone became one of the main reasons why some RPDs had to liquidate their businesses.

### 5.3.3.5 Conclusion

Most of the innovations that were discussed by the participants were product and process innovations. However there were some innovations within the business models from a couple of the participants. From the innovations discussed above, it is clear that some of the companies do not innovate enough with regards to their competitors. The residential property business has seen some innovations with regards to the uses and features they include within their developments. The medium to high income residential developments have definitely seen a lot more innovation than the affordable housing market.

Therefore innovation within business models is twofold. The medium to high income RPDs seem to understand and integrate innovation processes much more than affordable housing RPDs. Developer 9 has mentioned the innovation he will be introducing into his affordable housing business model, which will most definitely change the market for his competitors. But currently, innovation within the business models of medium to high income RPDs is on a much bigger scale than with affordable housing residential developers.

### 5.3.4 RESEARCH QUESTION 4

**What influence does closed innovation as opposed to open innovation have on residential property developers' business models?**

The fourth research question will be addressed by first identifying the various competitive advantages of the RPDs and then the key resources being used. The researcher wanted to determine whether each developer's competitive advantage had any influence on their ability to make use of closed or open innovation techniques. The identification of key resources could also provide an indication of the extent to which these developers make use of closed or open innovation techniques. This section will then follow with a more detailed discussion on the influence of closed and open innovation techniques on RPDs' business models.

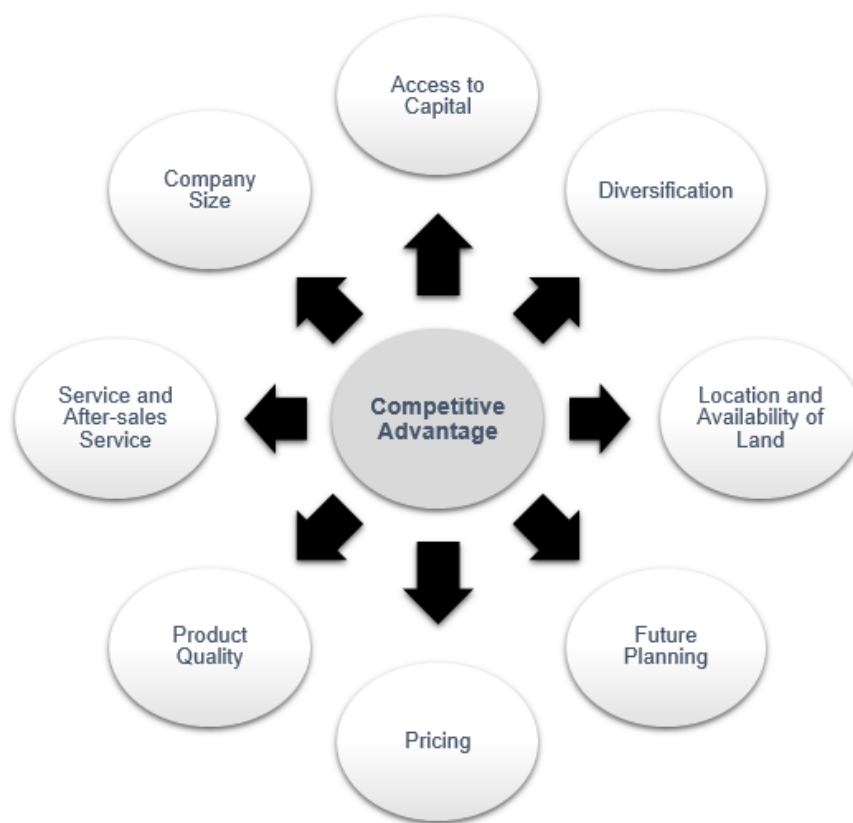
**Figure 14: Taxonomy of research question 4**



### 5.3.4.1 Competitive advantage

Each RPD's competitive advantage might provide the reason why they choose to keep their innovation processes closed or open. The competitive advantage informs the company's structures and the way they operate. The competitive advantages that were identified include access to finance, diversification, location and availability of land, future planning, pricing, product quality, service and after-sales service as well as the size of the company.

**Figure 15: The various competitive advantages identified**



Source: Researcher's own representation

#### Access to capital:

- *“Our access to capital. We have established relationships with the financial institutions in our market and it is tough to play in our section... but big enough that the smaller companies cannot compete because of financing availability.” Developer 5*

The RPDs who have been operating for more than 20 years, have established good relationships with the financial institutions and obtain finance much easier than a new player in the industry. The established RPDs will therefore have a competitive advantage with regards to financing of projects.

#### Diversification:

- *“And the fact that we diversified and understand these different models is definitely an edge. I would say turnkey and our diversified product.” Developer 9*

Developer 9 believes that their diversified portfolio and approach is their competitive advantage. They are able to develop anything from retirement villages to affordable, medium and high income housing. This enables them to develop any project they intend to.

#### Location and availability of land:

- *“...the need for location or a good location doesn’t change and we have got a lot of land. That keeps us ahead of our competitors.” Developer 1*
- *“We do. And we are more strategic from a land point of view. We have got strategic land holdings.” Developer 8*
- *“Ja, well obviously the big thing is you have to have the right land and in the right places. I think that is one of our key strengths...” Developer 10*

The majority of the RPDs recognise the importance of available land at strategic locations. Without land business is impossible. The more land these RPDs have, the greater chance they have to conduct business. They also stated the importance of these land portions being available at strategic locations. Developer 8 stated that they will rather obtain as much land as possible and only develop it once it becomes valuable or part of the city as the city expands. Vacant land is expensive if it is located within the city, close to schools, shops and places of employment. These developers therefore try to predict the direction of the city’s growth and purchase land in these areas at cheaper prices. Then only develop them once the city has expanded towards these areas.

#### Future planning:

- *“And then to look at new business: there is always a lead time to get something done. So we spend time on new business as well.” Developer 1*

- *“We have more than one project running at the same time...” Developer 8*
- *“So we plan five years in advance...I would say our biggest differentiator, planning five years in advance. And the amenities we give.” Developer 8*

Developer 1 and Developer 8 explain how their businesses are sustainable by planning projects in advance. They both stated that developers cannot rely on one project at a time, because the councils take too long to approve them and there are always difficulties with each project. In order to ensure an improved cash flow, multiple projects have to be planned at the same time.

#### Pricing:

- *“Look we are in affordable housing so we have got to be competitive with pricing. If we are not, we are out. That’s a very sensitive thing in our market...” Developer 3*
- *“The difference between us and our competitors is that our product is cheaper than their product in the sense that our business model is different from the other guys, so we can sell a unit at fifty thousand rand cheaper than our competitor...” Developer 6*
- *“...whereas where other developers are, there might be ten developers in one specific area and everybody doing the same product, and then you start entering into a price war...” Developer 10*

Developer 3 states that the affordable housing market is an extremely price sensitive market and that all the RPDs in this market compete on price. Developer 6 identified a way to drop their price per unit by R50 000, by cutting out all the extras. He believes that this market is not affected by extras and normally clients only add extras later when they have the money. Therefore Developer 6 is able to sell their units for much cheaper than their competitors. Developer 10 agrees with Developer 3 and states that it becomes a ‘price war’ when more than one developer compete in affordable housing, especially when they develop in the same areas.

#### Product quality:

- *“...what makes us different from everybody else is that our units are the best quality...” Developer 10*

Developer 10 is focused on the quality of their units and they do not hand any units over to new owners if the units are not entirely complete and up to their quality standards. Developer

10 believes that this ensures their developments to sell faster and increase referrals to their developments in the future.

#### Service and after-sales service:

- *“Especially after sales service. First time home buyers, so we have to educate them through the whole process. Not that they are uneducated...They don’t know this process...they want to be informed on every step of this process...” Developer 3*
- *“Obviously all the nice to haves must add onto that, aftersales service, all those things must happen and then I think you are pretty much there.” Developer 7*

Developer 3 and Developer 7 have realised the importance of service throughout the development and purchasing process as well as after-sales services. These developers realised that owners are more likely to refer friends and family members to these RPD’s future developments, if they received great service from them. These participants believe that it assists with sales in the future.

#### Size of the company:

- *“I am small and because I am small I am able to be agile, I am able to take advantage of opportunities at a faster pace than the bigger guys...” Developer 2*

Developer 2 believes that being a smaller company puts him in a position to make decisions on investment opportunities more quickly than the larger companies. Larger companies normally have to obtain approval from all the shareholders before a decision can be made, while small companies can make decisions much faster and possibly purchase land before other developers identify these pieces of land.

#### **5.3.4.2 Key resources**

The key resources that were identified by the participants consisted mostly of the construction teams, professional team and property management agencies. The professional team referred to the architect, town planner, civil engineer, electrical engineer, geologist, environmental specialist and quantity surveyor. The use of external professionals, means that the RPDs are outsourcing some services due to the lack of these services and knowledge within their own organisations.



Construction team:

- *“And then you have to have proper construction companies that you can trust. We make use of a number of companies. We use a variety of people but let’s say... it is not anyone: we select them carefully and then we deal with it.” Developer 1*

Developer 1 mentioned that their construction teams play a significant role in the success of their company. They regard this role as being too specialised for their company to do themselves and it requires a large amount of dedication, therefore these developers cannot rely on one construction company alone.

- *“Our contractors, we have got a strategy of empowering: So we always busy with new contractors. There are the ones that have been with us ten to fifteen years...” Developer 3*

Developer 3 also makes use of various construction teams and views this approach as being the best tool of empowering local labour. This participant mentioned that they have a couple of main construction companies that they have used throughout the years and then they also make use of local construction companies where they can.

- *“...so we have got a nice development team, it takes years to build up a development team...subcontract all our building out...I measure success in a sense if you involve people that are loyal to you...it takes a team to create a whole complex.” Developer 4*

Developer 4 believe that he builds up a relationship with his construction teams and forms a trust between them. He therefore makes use of specialists that can focus on each part of the construction to deliver the best quality within each unit.

- *“Yes, we have a core team that have been working together since 1996. I use this team because we have a trust among each other.” Developer 5*
- *“...we have got four contractors with us...the relationships that we have got stretches over years, it doesn’t help trying to get a new contractor every year and he doesn’t understand your business and you don’t understand his business.” Developer 6*

Developer 6 justifies why he only makes use of the four construction teams with whom he has built relationships over the years and states that they must be aligned with the business and understand their company. A new construction team will first have to learn and understand the

RPD's business and this could waste valuable time. Alignment is therefore an essential factor within these construction teams.

- *"...contractors that we use, electrical, plumbing, remember we split, we don't contract to a main contractor, so it is plastering, brick laying, a lot of those contractors have worked for us for twenty years and have grown with the business..." Developer 7*
- *"We have certain contractors that we use, we keep our in-house teams busy for about 1000 units a year, and everything over and above that we outsource." Developer 8*

The majority of these RPDs have built up relationships and trust with these construction teams, but all of them make use of more than one construction team, due to capacity and pricing competitiveness. This participant has his own in-house construction team, but does make use of external construction teams when their capacity is exceeded. Developer 8 therefore has the internal knowledge and expertise within the company to construct his developments, but capacity sometimes become an issue.

- *"On the construction side ja, we basically have suppliers and sub-contractors. Obviously we are always searching for new ones, comparing price, service delivery and quality." Developer 9*
- *"Because our company is so small we don't have our own in-house construction company...we outsource all our construction work to specific, hand-picked contractors, which we have longstanding relationships with." Developer 10*

It seems that it is too costly for the majority of these participants to have in-house construction teams, which is why they rather outsource this function of the development project. Trust was the main consideration throughout the discussion on construction teams and all of the participants mentioned the relationships which they have built up between themselves and their construction teams.

#### Professional team:

- *"So we will not easily make use of for example, too many land surveyors. Because the land is the land. Here and there we will use other consultants on let's say architecture or civil engineering." Developer 1*
- *"...you work with a lot of professionals within the construction industry, so your architects, your quantity surveyors, your town planners, and all the different engineers that are involved." Developer 2*

- *“Throughout the years this professional team has stayed with me and hasn’t changed too much.” Developer 5*

The view on the professional teams differed to the construction teams in the sense that these participants primarily had one of each (architect, land surveyor, engineers and town planners). The participants trusted each professional in his or her discretion on their specific field of excellence. The RPDs outsource the professional functions, since it would be too costly for the companies to employ a professional in each sector of the development.

#### Property management agencies:

- *“So the management of the property, we are outsourcing it. We have chosen a model of not doing stuff that we are not good at...” Developer 2*

Developer 2 mentioned how he rather makes use of a property management company to manage the leasing function of his developments, since they have a better understanding of this part of the development and he trusts this company to manage the leasing in a profitable manner.

#### **5.3.4.3 Closed innovation**

There have been various discussions within literature on whether companies should make use of closed or open innovation processes. This section will discuss some of the viewpoints from the participants that make use of closed innovation (or a form of it) and why they make use of closed innovation processes.

#### Employing the right people:

- *“The company has always had great management and it reverts back to the way they have solved problems and transfer the knowledge down to their successors.” Developer 6*
- *“I think when you are starting out in a business; the most important thing obviously is the right people, so we surrounded ourselves with the right people...” Developer 7*
- *“I would say the people. People are very important to us, the people that work here, I think our company culture is a big thing...” Developer 10*

Developer 6, Developer 7 and Developer 10 believe that the success in their companies can be attributed to the employment of the correct people with the necessary knowledge these companies require. Developer 7 also mentioned the importance of knowledge transfer from the management within a company to its employees. This enables the company to derive as many innovative solutions without the use of external knowledge as possible.

#### The ability to do everything in-house:

- *“...the guys vertically integrate and they build everything themselves...the marketing is insourced, everything they do is basically internally managed, because that is how you manage your risk and your profits.” Developer 1*
- *“We design and build and market everything is in house.” Developer 7*
- *“We do our construction in house as well, so that is obviously just as important. So these days you cannot sub out your... So I would say the whole turnkey approach; you do everything yourself...” Developer 9*

From the discussions between Developer 1, Developer 7 and Developer 9, it seems like these RPDs try to do as many of the development factors in-house as possible. They regard this as a means of cutting costs. Although this means that they have little to no profit margins during the bust cycles, it enables them to have large profit margins during the boom cycles. These participants viewed this approach as risk management, since they are able to control all of the costs within the entire development process and have all the knowledge available in each sector. It must be mentioned that this approach can be expensive, especially for a smaller development company, since the developer will have to employ these professionals. It was mostly the larger development companies which had this approach, since they were able to afford it during the bust cycles.

#### Information management systems:

- *“...our AT systems, the information technology, because if you have such vast numbers of people that are involved in the process, you need to have a proper information management system, and we spent quite a bit of time on that; it provides us with information real time on what is going on in our development.” Developer 1*
- *“We have got an estate app that also provides us with information and then also we have got things like Facebook pages and social media and also a website, to communicate with current and previous people that were here.” Developer 1*

- *“Now the electronic reporting system is important...You go onto that it takes you onto our webpage, you can actually do it through our company app...you can buy electricity and all of that and you can go into the snagging...Very good system, something we designed ourselves because there isn’t anything like that in the market and it’s worked wonders for us.” Developer 7*

Developer 1 and Developer 7 explained how they both designed electronic management systems to gather data on their residents to resolve issues and improve their processes through new innovative techniques in the future. The electronic management systems enable these RPDs to innovate their processes from within the companies, since their residents inform them directly on the various issues they experience, which means they can resolve them immediately and make modifications with the next developments. This eliminates the need for external knowledge to innovate their business models.

#### **5.3.4.4 Open innovation**

Open innovation was only defined in 2003 as discussed in Chapter 2. Some theorists believe that it is currently the best means of innovation. It is argued that companies tend to think and innovate in the same ways as before, but these companies cannot expect different results by doing things in the same ways. This section will discuss the views of the participants that supported the idea of open innovation.

#### **Skills shortage:**

- *“I think what has happened over the last twenty one years in business is simplistically skills have become more difficult to come by, so from the construction side that’s extremely difficult to get right, so it is taking a lot more effort, it costs us a lot more money in management to make sure that happens.” Developer 7*
- *“... impossible, without big capital and skills to enter the market. Developer 9*

The above participants referred to skills shortage within their organisations. Due to the lack of skills within the market, it becomes difficult to innovate their business plans from within the company. These developers then become reliant on outside assistance or knowledge to innovate their business models to stay ahead of their competitors.

### Government involvement:

- *“I think from government side as well, they see the need for housing in a specific market, and the new move towards these catalytic mega-projects...” Developer 10*

With regards to the need for housing in Gauteng, the government has also recognised the need for outside assistance and the specialised services that these RPDs can provide especially with the catalytic mega-projects as Developer 10 mentioned. Government has to make use of external knowledge since they do not have the skills to develop such large projects.

### Rental and asset management:

- *“So the management of the property, we are outsourcing it...We have chosen a model of not doing stuff that we are not good at, so property management is a skill on its own and as a young company it is not a skill that we have...” Developer 2*

The management of property or leasing portfolios seems to be something that is only outsourced at the smaller RPD companies. The larger RPD companies seem to have acquired these skills over the years and mostly do the property and leasing management themselves.

### South African Residential Developers Association:

- *“...we formed an association of all developers, called SARDA, South African Residential Developers Association, to act as a mouthpiece for developers to speak to the local councils, to speak to the environmental authorities...” Developer 3*
- *“Then there was an authority established among all the developers known as SARDA. The majority of the developers belong to them and they try to take on and resolve most of these issues at the councils.” Developer 6*

The association known as the South African Residential Developers Association (SARDA), was a form of open innovation and not open innovation in full. But the researcher wanted to include this as it shows how RPDs had to go beyond their organisations to resolve specific issues to reduce the time spent on approval processes within councils. This association was formed by various RPDs that seek to address councils as a unified professional body and present multiple solutions to various problems that councils face on a daily basis.

### Partners in success:

- *“...we have got a number of development partners, which means that these guys are always competing internally with each other, and they are looking at innovative ways of developing in the future.” Developer 1*
- *“...in our market you find township developers, that focus purely just on servicing stands. So we are in association with a few, one or two of them, and they always played a significant role in our success. We didn’t have to put down the capital, buy land in the beginning.” Developer 3*
- *“Yes my financial partners were probably my most crucial partners in my success. Without them I was unable to reach any of my successes.” Developer 5*

This discussion was on the key partners in the RPDs’ success. The researcher wanted to determine whether the participants made use of external assistance and knowledge to achieve success in their industries. The participants mostly attribute their successes to the financial institutions who provided them with funding throughout the years. This however is not necessarily a form of open innovation, but more just outside assistance. The other form was development partners. Some of these participants made use of development partners for their knowledge and capital contributions. The knowledge contributions obtained from the various development partners is considered as open innovation, but most of these participants only made use of development partners until they were successful, then proceeded independently. The last form of open innovation mentioned, was the use of professionals as part of the development and planning process. The participants mention how they could not have achieved success without their professional team. RPDs therefore do make use of open innovation to a large extent.

#### **5.3.4.5 Issues**

A couple of issues arose during the interviews with regards to open innovation processes. The issues related to internal and external factors. As Developer 5 and Developer 9 discussed above, developers became too comfortable by just developing the units that they were used to, because there was not much competition in the market in the 1990’s and early 2000’s. Then when competition increased in the market, most of the established RPDs were not geared for the competition. So they had to innovate their business models. It would have been ideal to innovate their business models within the organisations, but most of these RPDs were not in a financial position during the global financial crisis to consider closed innovation.

Therefore most RPDs had to consider open innovation processes in order to survive the tough economic times from 2007 till around 2010.

The participants raised the issues related to council approvals and approvals being delayed up to three years, where it used to take only six months. Therefore open innovation might not even be effective in some cases, since the problems could lie with the councils and not with the RPD companies themselves.

#### **5.3.4.6 Conclusion**

The type of innovation processes being used within a company depends largely on their financial situation and size of the company. All the participants mentioned that financing from the financial institutions largely contributed to their success, but some of these RPDs refrained from changing their business models and tried to develop and sell the same units that they have been developing all the years of their existence. Only the RPDs that changed and innovated their business models managed to grow throughout the economic downturn and these companies were able to innovate their business models with closed innovation processes. The companies that changed their business models too late were forced to implement open innovation techniques. The larger RPD companies made use of electronic management systems, providing them with real time data from their residents. This enabled them to innovate their business models from within their organisations. These electronic management systems educated the RPDs with regard to the issues they faced and were able to successfully amend their business models accordingly without the assistance of external knowledge.

All of the participants did however make use of professionals such as architects, land surveyors, town planners, civil and electrical engineers and environmental specialists to some degree. It can therefore be concluded that all RPDs do make use of open innovation processes, even if it is only to a small extent with the assistance of an architect or a town planner. It can also be concluded that smaller RPD companies tend to make use of open innovation techniques due to the cost implications of employing all these professionals, while larger RPD companies tend to make use of more closed innovation techniques. RPD companies with large cash flows and big staff numbers are more likely to implement costly electronic management systems and employ a diverse range of professionals to ensure closed innovation techniques and limit the sharing of sensitive company information with external individuals or organisations.

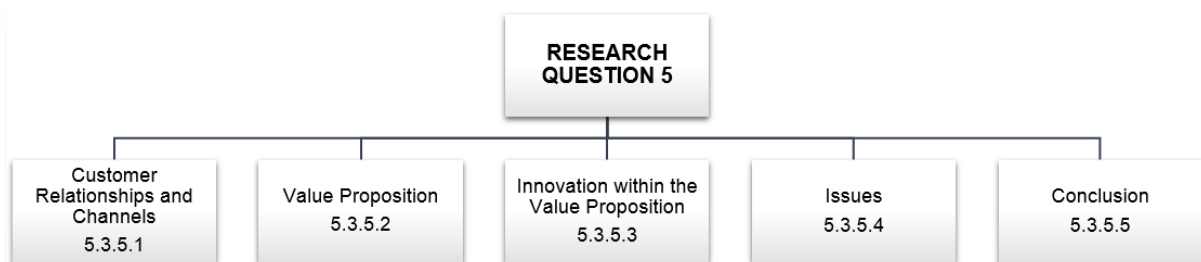


### 5.3.5 RESEARCH QUESTION 5

**How does the triple bottom line affect residential property developers' business models?**

This research question will be answered by dividing it up between customer relationships and channels used by the RPDs; as well as the value proposition of these RPDs. The researcher aimed to understand whether RPDs form any kind of sustainable relationship with their customers and whether they add value to the surrounding neighbourhoods and environment.

**Figure 16: Taxonomy of research question 5**



#### 5.3.5.1 Customer relationships and channels

After sales service and education processes:

- *“Our buyers are our biggest references...if we get a happy client, he will refer us to three or four or five people that work with him, or family or friends...” Developer 3*
- *“First time home buyers, so we have to educate them through the whole process...so that is education as well.” Developer 3*
- *“...they don't understand the concept of a body corporate...there is a lot of education, you must explain to them what is a body corporate about, what is their function you know why do you have to have a body corporate.” Developer 4*

Developer 3 mentioned how they educate their first time buyers on the entire buying process. This creates a type of loyalty among them, because they regard the company as being helpful and have a positive view on the company for the future. Therefore it ensures referral buyers, such as family and friends of existing home owners. Developer 4 agrees with Developer 3 and mentions that the residents need to be educated, especially on the functions of a body corporate.

- *“...our relationship stretches for a period of five years because we are bound by the NHBRC so we need to be involved and have relationships with clients, if there are any complaints and structural defects...” Developer 6*
- *“...we need to interact with people on Facebook, people appreciate it...from an after sales service what is very important is we have a team of after sales guys that are our maintenance guys, there are about five teams of them with proper vans, their own team, they can fix just about anything and we have an electronic reporting system.” Developer 7*

Developer 7 emphasises the importance of social media interaction with their residents. The participant stated that it is critical to keep up with the changes in communication channels, because residents change and have become younger over the years. They have to cater for all types of residents and have to address all ages.

- *“So they get newsletters, they get magazines, special offers, they get first notifications if we launch anything, discounts.” Developer 8*
- *“Look we have a call centre that works quite well and obviously we stay part of that development for years to come.” Developer 9*

Developer 6 and Developer 9 explained how the NHBRC regulates affordable housing and binds the RPDs to each development, ensuring that quality is delivered to the residents.

- *“...we have full time customer care consultants on all our sites, so that someone is available 24 hours a day. Clients can phone them and report any problems that they have in their houses...” Developer 10*

The majority of these RPDs communicate with their residents/buyers by means of call centres, sms and e-mail. The communication is done to ensure that the unit is handed over in perfect condition.

### **5.3.5.2 Value proposition**

The value proposition aimed to cover the value for residents as provided by the RPDs in each township establishment. This refers to the attractiveness of the development. Each development has certain characteristics as preferred by the future residents, which make the development unique. These defining characteristics include accessibility, transport, convenience, location, recreational facilities, security, mixed uses and lifestyle features within

the estate. This section introduces these concepts as included in these residential developments by the various participants, due to popular demand by the public.

#### Accessibility and transportation:

- *“...if you are looking at the lower end of the market, location you can get away with but then you need transport routes and other infrastructure like schools and so on...train stations and so on play an important role.” Developer 1*
- *“...it is very close to the CBD and what that means is the transport network is also very good...” Developer 2*

Being accessible to various amenities and places of work is one of the main characteristics of a development. People want to be close to places of work, because this means they have the opportunity to earn an income and make a living for themselves. Accessibility increases with the reduction in proximity to the city centres. Adequate public transport systems means access to places of work, parks, schools and shops. Developers pay premiums for vacant land in close proximity to existing transport systems.

#### Location:

Location and accessibility are almost synonymous. Prime locations normally have high accessibility, but locations with good accessibility are not necessarily located within city centres.

- *“...if you play in the very high LSM market then the land price is not that important but the location is even more important. People don't want to struggle to get to their place of work.” Developer 1*
- *“...think our units it's the location, definitely the location, it is very close to the CBD...this particular case with this project is it is close to the Gautrain station...” Developer 2*
- *“...demand will always be there because of its location, proximity to amenities...” Developer 2*

As stated by the participants, location is of essence for the higher LSM groups, like your medium to high income groups, but the lower income groups are less concerned about the location as long as the accessibility is high. Therefore railway and bus routes play a significant role in the success of these townships.

### Convenience:

- *“Ja, so it is the accessibility, safety and the convenience. We call it live, work and play. Because you have schools, we have a hospital, we have shopping centres, and more. There are some offices.” Developer 1*
- *“...because of the convenience factor, so it is sort of removed from the CBD but the CBD is right there...” Developer 2*

As mentioned above, convenience forms the third important factor for residential developments. People want to be close to various amenities, to avoid travelling far distances to various places of need.

### Recreation:

- *“...and jogging, you know the recreation component, we have 30 kilometres of jogging trails here, or walking trails at least...” Developer 1*
- *“...two minute walk and there is a park nearby...recreational stuff, educational, you have got retail, so it basically supports an urban lifestyle.” Developer 2*

The fourth factor is the proximity to recreational activities. This is not necessarily a critical factor for a residential development's success, but some of the participants did mention that recreational facilities help to sell units faster. Some RPDs even incorporate recreational activities within their estate as part of the open spaces.

### Security:

- *“...firstly it is because of security. Our research shows that our LSM or our target market is very security-sensitive...” Developer 1*
- *“...he or she will always want a place to stay that is convenient, well managed, safe...” Developer 2*

Security features are mostly found within estates for medium to high income residents. This is because these residents pay an additional premium for security features like a guard house with patrolling guards. Security has become a necessity for most medium to high income residents. They enjoy and sense of safety.

### 5.3.5.3 Innovation within the value proposition

#### Diversification:

- *“I want to actually get into opportunities where I develop to sell rather than to develop to rent only...it will be determined by where the opportunities are ...” Developer 2*
- *“...we sell off 70% of the development as full title houses and then keep 30% of the houses as rental stock.” Developer 5*

Developer 2, Developer 4 and Developer 5 diversified their business models with a mix of rental housing and full title housing which they sell off. This enables them to create some rental stock for long-term investment and sell part of the development for short-term investment and to release money for the next development. This also caters for a wider part of the market.

- *“We have tried the leasing...offices...shopping centres...hotels...clusters, free hold homes and what came out of all of that in the last twenty one years is focus on the product that you know best...” Developer 7*

Developer 7 realised, after diversifying too much that he needed to focus purely on the residential side since he is best at it. He does however diversify within his residential estates and provide affordable housing, housing for couples and housing for families within the same estate. This participant believes that he integrates the various income groups by providing them with nicely fitted affordable units with easily accessible amenities within the estate.

- *“...new affordable housing - call it shelter housing - where we just down spec and we do a different high turnover, low margin model, the retirement business, and then rentals. Developer 9*

Developer 9 diversified his business model to include affordable housing, retirement villages and rental units. The participant informed the researcher that he changes his business model according to what the market desires.

- *“And it also sounds like that is where the change in the affordable market is coming. So exactly what the upper end developers did right on creating lifestyle and then basically your product you know - take a pace from there, and make sure you do it in your entry level model as well.” Developer 9*

Developer 9 was the only participant that expected a major change in the affordable housing market and he wants to diversify his affordable housing model and align it with the medium to high income residential model. The participant mentioned that he wants to add features like basic security and walls around the estate. Also some recreational features, which affordable housing estates do not normally have. He mentioned that everyone has a need for these features within an estate.

All these RPDs diversify their business models for improved economic bottom lines to create sustainability within their financial structures.

#### Sustainability:

- *“They are looking at solar street lights instead of electricity, and LED - even in the houses, etc.” Developer 1*

Developer 1 mentioned that they are currently looking at more efficient and environmentally sustainable ways of establishing their residential developments. LED lighting within the houses as well as the streetlights are the major steps taken to make these developments more environmentally friendly. This ultimately contributes to the environmental bottom line.

- *“...convenience element which is sort of bringing that lifestyle, so you are close to a park, you are close to a school, your transport is good...” Developer 2*
- *“... certain contractors that we use, but we keep our in-house teams busy for about 1000 units a year, and everything over and above that we outsource.” Developer 8*

Developer 2 explained how he aims to create more sustainable cities through the incorporation of various uses, for residents to live, work and play within their immediate surroundings. Developer 8 spoke about the sustainability of his company and employs a construction team large enough to build up to 1000 units each year. Anything above this will be contracted out to other companies.

#### Empowering local communities:

- *“...if you use seventy to eighty percent local labour...if you want to do extensions or tiles or burglar bars or whatever, here are the local people that we have utilised, so you create almost a little economic hub afterwards for the local people...” Developer 6*

Developer 7 contributes to the social bottom line through the creation of jobs within the communities where they develop residential estates. He mentioned that he does not have to add the extras within his units, because residents would much rather pay less per unit and add the extras later by making use of locals with the necessary skills who normally charge less than mainstream developers.

- *“Well not just to the community it’s to give back to the community but in some way or another it is also a little bit selfish because we would like to skill some people, skill some more people that can come and work for us and give them a job, tilers, plumbers, painters, I saw this company Foundation...” Developer 7*

Developer 7 not only creates jobs within the local communities, but actually employs these locals. These RPDs have found ways of feeding the social bottom line within the communities they operate.

#### Lifestyle estates:

- *“...so the lifestyle is important, you can’t pack thousands of people into a space without some sort of a lifestyle. So we put in these lifestyle facilities where they have got a restaurant, a gym, a spa, swimming pools, laundromat...” Developer 7*
- *“So we concentrate on a lifestyle, so whether it is a rental estate or whether it is a large estate with fancy accommodation, they all have the same facilities. So there are restaurants, swimming pools, little soccer fields, we put play areas in. Most have a little skate park, most have a pool.” Developer 8*
- *“...because it is added value to the end user. A person can now buy property and have access to schools within walking distance, they have parks...” Developer 10*

RPDs have really addressed the triple bottom line through lifestyle estates. They have created sustainable residential developments with various recreational activities (like walking trails), shops, gyms and restaurants. These developments have become self-sustaining and even created some jobs within the estates. RPDs were also able to raise the prices of these stands, houses and units due to the desirability of these developments. They have increased their economic bottom lines with these desirable estates by raising the prices per unit; increased the social bottom line through the creation of jobs with the addition of restaurants, shops and gyms; as well as increased the environmental bottom line by installing LED streetlights and establishing nice parks and walking trails within these estates.

#### **5.3.5.4 Issues**

It has become more difficult throughout the years to innovate the business models of RPDs. These developers have to become creative to increase their economic bottom line. Especially with all the environmental regulations, it becomes even more difficult to increase the environmental bottom line. It has become harder for RPDs to increase their economic bottom line, due to incompetent councils that lengthen the town planning process unnecessarily. All the environmental regulations have played a major role in residential developments and it is much more focused on increasing the economic bottom line, but unfortunately this could sometimes affect the economic bottom line.

The problem with the monopoly in the steel industry is that these RPDs cannot predict the prices for their units accurately and lose money if they have already started with the construction of a development and the steel prices suddenly rise. Parking spaces are considered to be a waste of valuable developable land to RPDs, but they could be an attraction to residents. It is difficult to reach feasibility within developments by controlling the mix between two- and three bedroom units, since three bedroom units take up more parking on site.

#### **5.3.5.5 Conclusion**

Accessibility and transportation, location, convenience, recreation and security influence the RPD's economic bottom line the most when establishing a new residential development. The more of these features a RPD can add to the residential development, the more attractive the development becomes to potential buyers. It is also important to balance these features, since it could become a costly exercise to add them to a development. Most RPDs try to identify some of these features within an area before purchasing a piece of land, to reduce the cost of features to be added to the proposed residential development and increase the economic bottom line.

The participants mentioned how they all diversified their business models to include a diverse range of housing typologies and sizes, mixes between rental and full title units, mix between affordable, medium and high income housing, as well as a mix between industries like retail and industrial. This diversification is done in order to minimise risk and increase the economic bottom line. Sustainability has also played a major role throughout these residential developments as more RPDs try and incorporate these developments with the surrounding



neighbourhoods and amenities. These developments become self-sustaining with their own schools, parks, shops and businesses around them.

The RPDs have become more aware of empowering local communities, where some of these participants do not add extras to his units, providing the opportunity to the locals to add the extras and becoming a small economic hub. Another participant has a programme where he trains and employs locals to grow his company and address the social bottom line. RPDs have moved towards the trend of lifestyle estates, where they incorporate walking trails, shops, restaurants and gyms within the residential estates. These additions to residential estates provide job opportunities within the estate and increases the social bottom line.

With the increase in lifestyle estates, RPDs were forced to incorporate more parks, walking trails and even LED street lights within these developments. The lifestyle estates along with stricter environmental regulations have therefore increased the environmental bottom line as well.

It is clear that RPDs never used to incorporate the triple bottom line within their business models, but the change in trends with residential estates and the changes in residential needs have increased the importance of the triple bottom line. RPDs cannot innovate their business plans anymore without considering the triple bottom line if they were to survive in this market.

## **CHAPTER 6: DISCUSSION OF RESULTS**

### **6.1 Introduction**

The purpose of this study was to explore, with the sample of residential property developers (RPDs) in Gauteng (South Africa), the innovation processes involved within their business models and to which degree these RPDs made use of innovation within their business models. The study also aimed to identify the challenges faced by these RPDs and the factors that prevented them from innovating their business models. Research has been performed on business and companies from a general perspective, but there is a lack of research on the innovation processes influencing the business models of RPDs. The necessity was identified to provide a better understanding on the innovation processes involved in shaping the business models of RPDs.

Based on the literature discussed in Chapter 2, five research questions were identified in Chapter 3 to address specific research areas within the overarching study. This chapter presents an interpretation of the key findings obtained from ten interviews with RPDs in Gauteng. The findings were analysed with the body of literature as discussed in Chapter 2, in order to draw similarities and identify differences or additions to the existing literature.

The structure of this chapter is formulated according to the five research questions as laid out in Chapter 3.

## 6.2 RESEARCH QUESTION 1

**What role do financial institutions play in the success of residential property developers' businesses?**

### 6.2.1 Change in the markets

Gaffney (2015) mentioned that the property industry is influenced by boom and bust cycles, creating risk for investors in this industry. Gaffney (2015) is of the opinion that the financial institutions' investment involvement is determined by the market and its boom and bust cycles. The research supported these arguments and the participants stated how the residential property development market's barriers to entry are so high due to the large upfront financial investments required. Nine out of the ten participants stated that the barriers to entry are high due to bulk services contributions, land-, steel- and general construction material prices being too high to cover from a start-up point of view. The research justifies the involvement of the financial institutions and indicated that the financial institutions provide bonds to potential buyers when the markets are in a boom, but when the economic situation of the country declines the financial institutions lose confidence in the potential buyers to repay their bonds and therefore rejects most bond applications as supported by the arguments of Holgersen (2014) and Gaffney (2015). This creates a difficult situation for the RPDs as they struggle to sell their stands and units. They are then forced to change their business models to survive the tougher economic times.

The economic situation of the country mostly determines whether the selling market is thriving or the leasing market is dominating. During the economic downturns when the market experiences a bust, the market is more likely to rent houses and during stronger economic times, the market is more likely to buy houses. As explained above, financial institutions lose confidence in the market to repay their bonds and become stricter on lending (Gaffney, 2015; Holgersen, 2014; You, 2014). This then pushes the market to a bust and leasing cycle. During the stronger economic times, RPDs operate with strong cash flows and sell their houses/units fast, recovering their money in a very short time period to enable investment into the next project. When RPDs follow a leasing business model, they lock their money (or the financial institution's money) in for a long time. The return is much slower than with a selling business model. The research concluded that the leasing cost structure is geared to recover investment money over a long time period, but at escalating rental rates meaning a higher return on investment over the long run. The selling cost structure aims at a lower, but quicker return on

investment. The cost structure for selling is geared to recover the entire initial investment plus the return within a short time period.

But the leasing model is not only driven by the banks' attitude to become stricter on lending rates and requirements, but also on the market's behaviour of not buying, due to uncertainty in the country's future. Therefore the financial institutions (investors) and the market (potential buyers) lose confidence during economic downturns.

### **6.2.2 Change in the business model**

Holgerson (2014) mentioned how some developers have to change their business models by developing smaller units or providing less parking to cut down on the development costs in order to sell the units cheaper, with the hope of more people obtaining loans from the banks to sell their units. The research supports this argument and it was confirmed that stand- and house sizes are decreased to drop the price of the units, enabling potential buyers to qualify for bonds. The research further discovered that RPDs even build residential units without any extras to drop the prices significantly. RPDs have tried to cut down on parking within developments, but contrary to the notion of just cutting out available parking within a development, there are regulations governing the parking provision in residential developments within Gauteng. The research found that parking requirements for specific units have become too expensive to produce, forcing RPDs to provide a mix of units when planning high density developments. From the research, it became clear that most RPDs who failed over the years, lacked the ability to change their traditional ways of doing business and lost confidence with the financial institutions. As the relationships with the financial institutions deteriorate, so does the business due to a lack of funding on projects. As stated by Bryson & Lombardi (2009), the importance of financial institutions' role in property development is critical due to the difficulty in acquiring sites, since this requires a large financial investment.

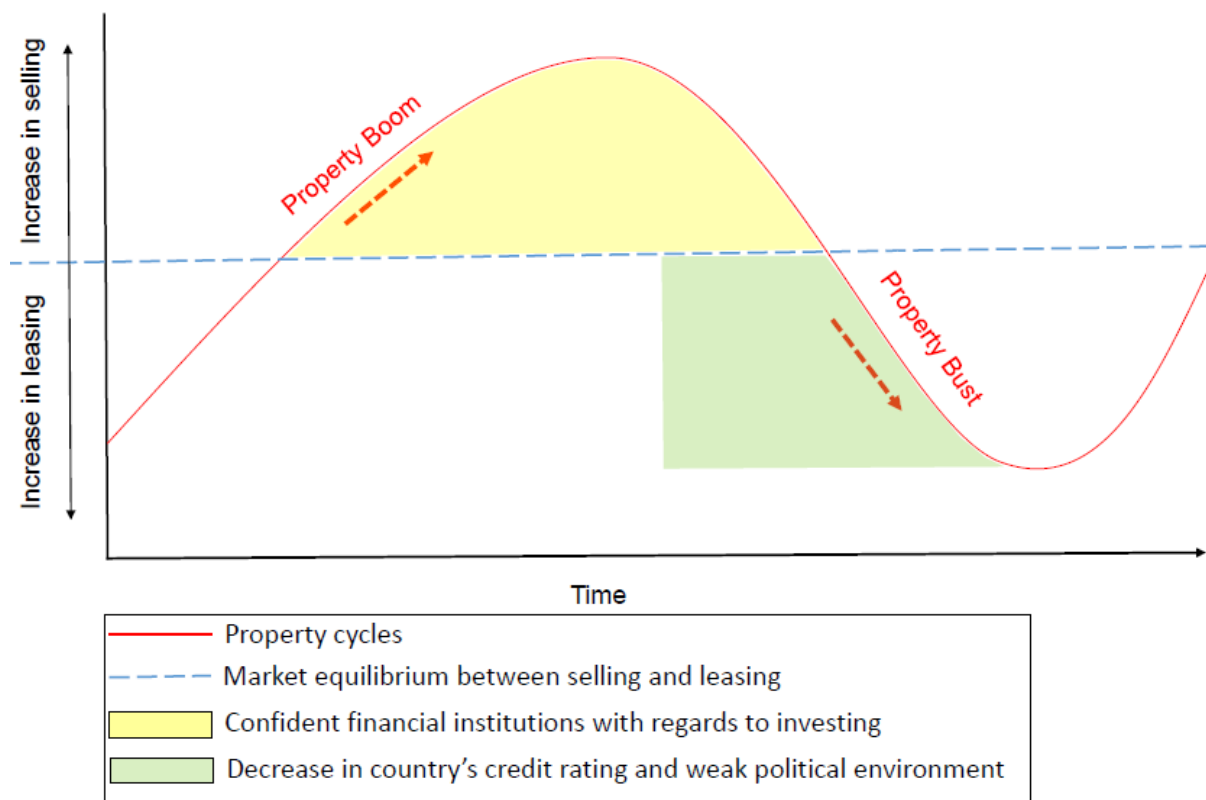
### **6.2.3 Conclusion of results**

Financial institutions provide residential property developers with the necessary funding to take a project from the planning phases to construction. The research has proven that financial institutions are regarded as a key partner in RPDs' success. The capital investments are too large for a company to cover, such as the bulk service contributions and installations. Financial institutions do however lose confidence in the market during economic downturns and become very strict on lending rates and regulations, which makes it difficult for potential buyers to

obtain bonds. This places a large amount of pressure on the RPDs as they struggle to sell their units and forces them to change their business models from selling to leasing.

The business model is therefore controlled by the market. During a residential boom RPDs are more prone to sell their units and during a bust cycle RPDs are more likely to lease their units. The research has shown that the two biggest issues currently with regards to obtaining funding from financial institutions, were the international credit downgrade and the political situation in South Africa. Financial institutions react immediately with regards to a country's credit rating for investment and its political situation. These are argued to be two major factors determining the investment potential within a country and has a large influence on the confidence levels of financial institutions to lend money to the market. From these results the researcher could draw up the diagram below indicating the markets and the influence of financial institutions.

**Figure 17: The influences on the residential property market**



Source: Researcher's own representation

## 6.3 RESEARCH QUESTION 2

**How has the concept of sustainability influenced the formulation of residential property developers' business models?**

### 6.3.1 Sustainability within the company

Sustainability was defined in terms of company sustainability and project sustainability. As stated by Bryson and Lombardi (2009) the concept of sustainability in developments has become an increasing consideration, since value and profitability are some of the main factors that drive the business models of companies today. The value of a company can be increased by developing cities in a more sustainable way (Bryson & Lombardi, 2009; Krueger & Buckingham, 2012). The research supports the above statements of sustainability not only benefitting the public or potential buyers, but also the company during the tougher economic times. These RPDs have changed their business models in more sustainable ways, rather than just focussing on single housing typologies. During the research it was mentioned how some developers were not prepared for the global financial crises and did not diversify and adapt their business models to the collapsing market. Sustainability within their business models became a critical factor for survival. Evans et al. (2016) describe business model innovation as a potential mechanism to integrate sustainability into business.

The research discovered the importance of building a strong brand and delivering high quality products to ensure a good track record for sustained growth and continuous business in the future. Factors such as quality of materials and finishes became differentiating factors to build brand awareness. The research supports the theory and mentions that sustainability of property developers' business models introduces institutional theory, where the property developers have to deal with social pressures that are external to the company. A large part of institutional theory includes the consideration of environmentally friendly developments and building a positive brand for the development company (Bryson & Lombardi, 2009; Krueger & Buckingham, 2012). Krueger and Buckingham (2012) refer to this as the creative city planning approach.

After-sales service proved to be a growing part of the business and developers even contracted external experts to monitor the quality of their units for a smoother handover process. The research proved that companies became more sustainable within the tougher economic times, through the provision of good overall service. Bryson and Lombardi (2009) as well as Krueger and Buckingham (2012) explain how developers have introduced

sustainability into their business models in various stages of the development process, including the design, construction or occupancy stages. The improved after-sales service had a positive effect on the marketing of current and future developments. The participants mentioned how referral buyers have increased since they started spending more time on their after-sales services. Current buyers were more inclined to refer family, friends and colleagues to purchase in the same residential development, if they had a pleasant buying experience.

The research further identified networking as being a critical component with regards to the sustainability of the companies during the tough economic times. Building a network with professionals in the same industry, ensured a higher possibility of continued business in the future. Professionals tend to refer jobs within a network and inform each other on potential developable land available.

From the research the following functions were identified as being significant components within a residential development company's sustainability:

**Figure 18: Key activities for residential property developers**



Source: Researcher's own representation

### **6.3.2 Sustainability within projects**

The research discovered the importance of various sustainability factors within residential developments. There was a main need among residents to have access to basic services and infrastructure. The research supports the statements made by Krueger and Buckingham (2012) and indicate that RPDs tried to purchase land in close proximity to existing amenities such as schools, churches and shops. When large pieces of land are purchased on the outskirts of cities, it became a requirement to provide public infrastructure within these developments, creating self-sustaining communities. The research recognised the need for RPDs to conduct market studies and an area analysis before a piece of land is bought. The feasibility of a project is determined during these studies, to identify the various amenities within an area and their distance from the proposed development. The amount and proximity of schools, shops, churches and places of work increase the sustainability of the project and is also supported by the literature as covered by Herbert and Murray (2015).

The first sustainability factor is access to places of work and public transport facilities as also noted by Krueger and Buckingham (2012). Gauteng is already a densely developed province. It is difficult to find vacant land to develop within the city centres, therefore the majority of new residential developments are situated far from the central business districts. Access to public transport therefore becomes a key factor in the degree of sustainability of a new development. The second sustainability factor is convenience. Convenience relates to the ease of living. If residents can live, work, pray and play within their neighbourhood, it increases the sustainability of the development. The third sustainability factor is recreational facilities. The number of parks, gyms and sports complexes within an area or the new development, increases the sustainability of the specific residential development. The fourth sustainability factor is security. The security factor is more aimed at the higher LSM groups like the medium and high income housing projects, but it remains a factor of sustainability within a new residential development. The research indicated that RPDs try to incorporate some features of security within their developments, like guardhouses and electric fencing. The fifth sustainability factor is location. Location is almost the overarching factor. Due to the accessibility, public transport, convenience and recreational facilities, the location becomes suitable for a sustainable residential development. Then the last factor relates to environmentally friendly sustainability. Using construction materials and features that are environmentally friendly. Zhu et al. (2012) argued that an environmentally conscious public as well as regulatory authorities and governments, changed the market conditions and presented new opportunities to the developers to make use of environmentally friendly products and amend their business models in innovative ways (Bryson & Lombardi, 2009). Joyce and



Paquin (2016) agree that business model innovation needs to deliver and capture more value, but adds that sustainability is the main driving force behind creative innovation within business models.

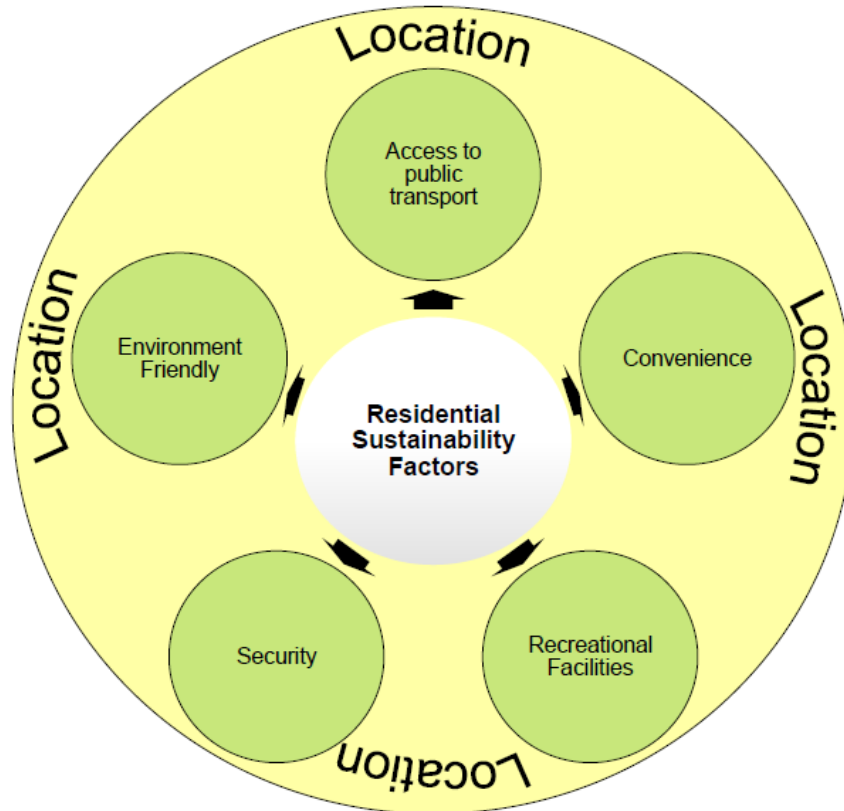
Some of the RPDs even employed local labour to assist with the construction phases, whether it be for the extras after construction was completed or for the entire construction process. This enabled the local communities to become more economically sustainable. The RPDs mentioned that this approach profited their business models and also gave back to the communities.

### **6.3.3 Conclusion of results**

Sustainability has become increasingly important within the formulation of residential property developers' business models. The research indicated how sustainability has become a critical factor within the residential development companies' longevity as well as the residential townships they develop. The incorporation of sustainability within each project, builds a stronger brand for the company and increases the possibility of continued future business. The key activities identified by the research increasing the sustainability of a company includes brand awareness; marketing and sales; product design and packaging; execution and delivery of product; pricing; and market research.

The sustainability of projects was increased by the proximity to existing public infrastructure like schools, shops, churches and places of work. Where there is a lack of infrastructure within the area, it needs to be provided within the residential development to increase the sustainability of the project. The factors that were identified as the largest contributors in sustainable residential developments included access to public transport; convenience; recreational facilities; security; location; and environmentally friendly development. As mentioned in the analysis, location can be viewed as an overarching factor, therefore the following model was designed by the researcher to illustrate these sustainability factors.

**Figure 19: Value-adding factor framework for sustainability**



Source: Researcher's own representation

#### **6.4 RESEARCH QUESTION 3**

##### **How do residential property developers innovate their business models?**

The research indicated, with a 90% level of confidence that the residential property market, (regardless of the segment) has decreased over the last couple of years. This is mainly due to the global financial crisis and the banks losing confidence in the residential market. The RPDs were therefore in a situation where they had to become innovative to survive. The research highlighted a couple of changing trends within the residential industry. These changes represented opportunities for new innovations.

**Figure 20: Residential market trends**

<b>Change from:</b>	<b>Change to:</b>
No security	High security, especially with estate living
Hand written bank process	Electronic bank process
Standard design of house	Environmentally friendly design
Full title	Sectional title
Buying	Renting
Old people buying houses	Young people buying houses
Low density developments	High density developments
Large stands with a house	Smaller stand with the same size house
Conventional townhouses	Retirement villages
Normal sized affordable housing	Mega-projects (+10 000 units)

Two types of innovations were classified. The first innovation type is known as construction innovation and highlights all the innovations these RPDs introduced to minimise construction costs effectively and increase their sales. The second innovation type analyses all other innovations within the business model. These include various innovative selling techniques to information technology platforms.

#### **6.4.1 Construction innovations**

From the research it became evident that RPDs focused on innovative techniques to cut costs. After the global financial crisis the buying market plummeted and RPDs could not increase unit costs to earn a better return, but rather focused on cutting costs during the construction phases. The idea was to cut costs without compromising the quality of the units. One RPD realised that the affordable housing market was not sensitive towards extras added within the units. The research found that this market is price sensitive, rather than product sensitive. An innovative approach identified by the research, was to exclude all extras within a unit and basically just provide a very basic unit. This enables the RPD to sell the unit for approximately R50 000 cheaper than his closest competitor. Brown and Anthony (2011), Bozkurt and Kalkan (2014), Bereznoi (2015) as well as Evans et al. (2017) consider this innovation as a sustaining innovation to gain a competitive advantage over the competitors in the market. This also provides the local labourers with an opportunity to install extras within these units, creating job opportunities within these communities. Another approach identified by the research, was to decrease stand sizes while house sizes remained the same. This approach increased the

number of stands/houses produced within a given development. This is also seen as a sustaining innovation within the residential property industry (Bereznoi, 2015; Bozkurt & Kalkan, 2014; Brown & Anthony, 2011; Evans et al., 2017).

The second innovation involved the process design. The participants explained how mixed-use developments used to be sold from the plans before construction occurred. The developer would first sell and develop all the residential units, before constructing the school, mall, offices or recreational features. The developers realised that potential buyers only gain confidence in a residential development as soon as the public infrastructure have been built. RPDs therefore have to sink large initial costs to construct the estate's wall, school, gym, restaurants, hospital and other public facilities first, before the public becomes interested in buying. This especially relates to mixed-use developments on the outskirts of the city. The participants explained how this has increased their sales and profits exponentially.

The third innovation entailed the diversification of RPDs' business models. The 'one-housing-typology' business model is not sustainable during the tough economic times. Gassmann et al. (2014) and Wrigley et al. (2016) mentioned how companies cannot follow the approach of the past by relying on their existing business models to survive in the future and therefore have to innovate their business models all the time in order to ensure a long-term competitive success. RPDs therefore had to become more diverse in their offerings to keep up with the market and their competitors. Diversification within RPDs' business models changed the cost structure, revenue streams, channels, customer segments and activities. This is supported in the literature on transformational-sustaining innovation by Brown and Anthony (2011), Bozkurt and Kalkan (2014) as well as Bereznoi (2015). It opened up new opportunities for business. Where the majority of RPDs focused on selling houses, they all diversified into leasing as well. The changing market, diversified the business. Some RPDs diversified their business models to include a wider segment of the market. These models included one-, two- and three bedroom units within the same development. Some developments even included 4 bedroom houses. These residential developments cater for first time buyers and bachelors to families with pets. The one participant explained how they created a production line for housing. The construction and delivery of units occurred at a much faster rate than their closest competitors. This was a major innovation to aid with the housing shortage in Gauteng. The literature mentions how transformational-sustaining innovations are exciting innovations accepted by the customers and builds a reliable brand for the company (Bereznoi, 2015; Bozkurt & Kalkan, 2014; Brown & Anthony, 2011).

The one participant diversified his model to such an extent to include affordable housing, conventional housing, and retirement villages and even does property management. This participant is innovating his affordable housing sector to include features from the medium to high income residential models. His affordable housing developments will soon include security features such as guardhouses with security walls and recreational uses as well. The participant mentioned that the affordable housing model has not been disrupted in a very long time.

The other construction innovations mentioned in the research related more to product innovations and techniques that have been used in the residential industry throughout a number of years. It related to quality improvement of building material, which is supported by the literature on commercial innovations of Brown and Anthony (2011), Bozkurt and Kalkan (2014) as well as Bereznoi (2015). It also related to higher density developments.

#### **6.4.2 Other innovations**

The 'in-house' concept is taken up by the larger residential development companies that can afford it. It is a means of cost saving, but can really only be done by companies with large cash flows and revenue streams. The idea behind this approach is to limit outsourcing of work to a large extent. The larger residential development companies now largely have their own in-house construction, marketing, planning and management teams. These companies are able to cut the exorbitant costs of external subcontractors and employ these professionals at lower costs. Residential development companies with smaller cash flows and revenue streams are not able to keep these professionals busy on a full-time basis. It therefore becomes more feasible to employ external subcontractors per project. This method employed and discovered by the research is not so much an innovation as it is a process amendment, but the researcher deemed it necessary to form part of this section as it does provide a competitive advantage over the smaller competitors.

The electronic banking system was an innovation introduced by the banks which simplified the entire application process for RPDs to apply for investment funding. It also opened up an entire database of potential customers to whom the RPDs could market their stands and units upfront. This is known as a disruptive innovation within the residential property development industry and changed the way business was normally done (Brown & Anthony, 2011; Evans et al., 2017; Hargadon, 2015). This increased the speed of sales significantly. Marketing could now be done directly to the people who would qualify for loans. Along with the electronic banking systems, RPDs are also making use of this technology and creating their own

electronic capturing and managing systems for their estates. These electronic management systems are interactive systems for residents to log maintenance problems and record resident information. There were only two participants with electronic management systems and they explained how this would become the norm for RPDs in the future. This produced another disruptive technology within the residential property industry and is changing the way RPDs collect data on their target markets as well as the way they market their developments (Brown & Anthony, 2011; Evans et al., 2017; Hargadon, 2015). With these systems they are also able to discover market trends and customer needs. Baden-Fuller and Haefliger (2013), Bereznoi (2015), Berends et al. (2016) as well as Bashir and Verma (2017) argue that companies would have to change their business models with technological advances in an industry, in order to incorporate these features as part of their business plan and increase the customer value for an improved competitive advantage.

The last innovation mentioned by the research was the formation of the South African Residential Developers' Association (SARDA) to deal with common problems at city councils. These problems generally related to incompetent individuals delaying planning and construction processes. The association was formed to accelerate approval processes and the majority of RPDs belong to this association. This however relates more to a process innovation than a business model innovation.

#### **6.4.3 Conclusion of results**

RPDs mostly focus on product and process innovations and not so much entire business model innovations. These product and process innovations are known as sustaining and commercial innovations within the literature (Bereznoi, 2015; Bozkurt & Kalkan, 2014; Brown & Anthony, 2011; Evans et al., 2017). There have been a couple of transformational-sustaining and disruptive innovations within the residential development industry that have changed the way business is done completely. Diversification seems to be one of the largest business model innovations that RPDs had to adopt during the economic downturn. Diversification within RPDs' business models changed the cost structure, revenue streams, channels, customer segments and activities. RPDs had to diversify to spread their risk and to have a wider offering to their market.

The research found that the occurrence of innovation within the business models of RPDs was mostly governed by market needs and the country's economic condition.

Technological advances seemed to play a significant role in the innovation processes of RPDs. The advances in electronic banking systems changed RPDs' business models completely. They were now able to market their products directly to potential buyers who qualified for loans due to the access they had to these databases through electronic banking systems. The RPDs' latest disruptive innovation to their business models is the use of electronic management systems which they design for their estates. This captures live data on maintenance issues of residents and keeps an information database of all the residents within an estate. This electronic management system provides RPDs with latest market needs and enables them to innovate their business models accordingly.

## **6.5 RESEARCH QUESTION 4**

**What influence does closed innovation as opposed to open innovation have on residential property developers' business models?**

Open innovation is still a fairly new concept and was only introduced in 2003 (Chesbrough, 2012). It refers to the use of external knowledge to introduce new innovations within a company's business model. Some argue that companies tend to come up with the same innovations due to their knowledge base and would be able to accelerate innovations within the company if they make use of knowledge external to the company (Evans et al., 2017; Saebi & Foss, 2015). This section will analyse the results as presented in Chapter 5 and determine the influence of closed and open innovation on RPDs' business models and discuss whether there is a preference to the one or the other.

### **6.5.1 The influence of closed innovation on the business model**

The research indicated that a large number of RPDs' success is due to their excellent staff component with a broad knowledge base. The transfer of this knowledge from management to the employees also contributed to a successful closed innovation approach. The trend in larger residential property development companies, is to do everything in-house rather than outsource the knowledge component. The research has discovered that these companies would rather appoint professionals within a diverse range of sectors to increase its knowledge base, than outsource the work to professionals. This is only evident in the companies with large cash flows. The smaller companies still rather outsource for external knowledge input. Smaller companies struggle to appoint external professionals on a full-time basis, because they cannot keep them occupied on a full-time basis. Larger companies rather appoint external professionals, since they cut the costs of paying professional subcontracting fees. This also

ensures that the company's knowledge is not shared with any external sources. As Teece (2016) mentions, open innovation can be a failure if the partners are laggards and make little to no contribution to the innovation process (Teece, 2016). Saebi and Foss (2015) also mention the failure possibility of open innovation as it includes the management of knowledge exploitation, exploration and retention from both companies involved in the innovation process. The larger residential development companies would rather attempt to keep the town planning, architecture, engineering and construction in-house. It must be noted that all of these companies started out using open innovation, due to the costs involved with closed innovation.

The research further explained how these larger companies develop electronic management systems to create independent systems for closed innovation. Through electronic management systems, they are able to source information directly from their residents and discover techniques on how to improve their next development. An electronic management system provides them with real time data on each development. Anything can be logged on these systems, from general issues within the estate to snagging problems within a unit. These systems capture the data of each resident, enabling the monitoring of demographics as well. The company can view this data and use it to innovate their processes and entire business model according to the needs of the residents. Baden-Fuller and Haefliger (2013), Bereznoi (2015), Berends et al. (2016) as well as Bashir and Verma (2017) agree with this technological approach to innovation and claim that companies would have to change their business models with technological advances in an industry, in order to incorporate these features as part of their business plan and increase the customer value for an improved competitive advantage.

### **6.5.2 The influence of open innovation on the business model**

The research indicated that residential development companies are reliant on outside assistance or knowledge for innovation, due to a skills shortage within their organisations and is supported by Chesbrough (2012) and his views on open innovation. This supports the reasons for closed innovation as explained above. The smaller companies cannot afford the external knowledge within their companies and therefore have a skills shortage within the company. This also holds true for the government. The participants mentioned the lack of skills within the government to develop housing projects. The government therefore outsource their mega housing projects to the private residential property developers, to address the housing shortage within Gauteng. The smaller companies made use of property management services on their rental stock, while the larger companies rather trained their staff and developed these skills to manage rental stock from within the company. Hargadon (2015) argues that most companies struggle to innovate their business models, because they struggle to build new



capabilities, whether it is through open or closed innovation. This is mostly because the leaders of the company become set in their routines, technologies and knowledge and struggle to accept change (Hargadon, 2015). Tucci et al. (2016) mention the issue of barriers to intellectual trade for open business model innovation, where academics and industry professionals refuse to exchange ideas.

A form of open innovation was created among the residential property developers in Gauteng. An organisation was established by all the RPDs in Gauteng, known as the South African Residential Developers Association (SARDA). This organisation was established to find solutions to common problems RPDs shared. Through this organisation the members were able to source knowledge from each other and address councils on specific problems to form adequate solutions. This does not necessarily relate to innovations on the entire business model, but the researcher felt the need to include it since it addresses the concept of open innovation.

The residential property development industry involves numerous professionals such as architects, town planners, land surveyors, engineers, environmental specialists and geologists. The research found that these professionals form a large part of the entire development process and all RPDs have made use of their services to a large extent on each project. Although the larger companies try to employ as many of these professionals as possible, they still work with some external professionals on each project. This type of innovation is defined by Chesbrough (2012) as 'outside-in open innovation' and occurs when a company opens up their innovation processes to assistance from external organisations and professionals (Chesbrough, 2012; Tucci, Chesbrough, Piller, & West, 2016). It can be concluded that open innovation is employed to some extent in each RPD's business model.

### **6.5.3 Conclusion of results**

The research has indicated that all residential property development companies make use of 'outside-in open innovation' (Chesbrough, 2012) to some extent. This is however not by choice, since these companies intend to move away from open innovation. The findings indicated that the RPDs with larger cash flows rather apply closed innovation processes, while the RPDs with smaller cash flows make use of open innovation processes. The RPDs with larger cash flows only consult external professionals to a limited extent. The research indicated that closed innovation processes could be costly due to the appointment of various professionals, rather than outsourcing for external knowledge.

The research discovered that the new trend towards RPDs' closed innovation approaches is the creation and development of electronic management systems. These systems log all resident information on one system for each residential estate. The electronic management systems provide real-time data on each resident with regards to their demographics, issues they might have within the estate or even snagging problems, which the residents can log on the system. This enables real time market research on their target market.

As mentioned by Saebi and Foss (2015) as well as Evans et al. (2017), there are conflicting views on whether open innovation is beneficial to a company's business model. Some beliefs are that companies tend to come up with the same innovations due to their knowledge base and therefore they would be able to accelerate innovations within the company if they make use of knowledge external to the company. However, RPDs are moving away from open innovation approaches and rather try to innovate their business models from the knowledge within the company.

## **6.6 RESEARCH QUESTION 5**

**How does the triple bottom line affect residential property developers' business models?**

### **6.6.1 Customer relationships**

Boons and Lüdeke-Freund (2013) argue that the creation and delivery of customer value is the core focus of any business model, while Joyce and Paquin (2016) agree that business model innovation needs to deliver and capture more value, but adds that sustainability is the main driving force behind creative innovation within business models. Sustainability forms the core between environmental-, social- and economic value. The research has indicated that RPDs have recognised the value addition to their business models by increasing the quality of service they provide their customers. It was explained how the RPDs educate all their first-time buyers on the entire buying process. They realised education in the buying process creates loyalty among these customers. These loyal customers are then more inclined to refer family and friends to that specific RPD's future developments. The education process continue throughout the understanding of a body corporate. The majority of first-time buyers, whether in the affordable- or the medium income housing sectors, do not understand the formulation and functions of a body corporate and needs to be educated on this process. Evans et al. (2017) supports the idea that companies are striving towards the generation of a triple bottom line and believes it achieves sustainability within the business model.

The use of social media among the residents of residential estates and the developers, has increased over the past couple of years. Through the research conducted, the RPDs have explained how much residents appreciate feedback and information updates on social media. Through the use of social media, residents feel socially included throughout the development process. Communication is also done through e-mails and short message systems (sms) during the snagging and maintenance processes to ensure customers are fully satisfied with their units before handover takes place, as regulated by the NHBRC.

### **6.6.2 Value proposition**

The research identified a number of factors contributing to customer value increase with regards to the design of residential estates. These factors contributed to social integration of the residents as well as the environmental value contribution to the area. Accessibility and public transport was identified as the first value adding factor. Residents want to have easy accessibility to places of work, increasing their opportunities to building a living for themselves. The provision of public transport systems enables access to places of work, parks, schools and shops. The second value adding factor is location. Prime locations normally have high accessibility, but locations with good accessibility are not necessarily located within city centres. People pay premiums to be situated in good locations. The third factor is convenience. People desire the ease of living and travelling short distances to places of need. People prefer having all uses within walking distance of their houses. The fourth factor necessitates the availability of recreational uses. Although this is not a critical factor, it does add value to a residential estate and residents to value recreational uses within an estate or in close proximity to an estate. The fifth and last value adding factor is known as security and are mostly found within estates for medium to high income residents. This is because these residents pay an additional premium for security features like a guard house with patrolling guards. People pay a premium for a sense of safety. These factors are supported by Gassmann et al. (2014) and they explain the value creation in their “magic triangle” for business model innovation. The “magic triangle” address the customer’s needs, the value proposition, the value chain and the profit mechanism (Gassmann et al., 2014).

Environmental considerations play an increasing role within residential developments and the research found that RPDs are looking for more efficient and environmentally sustainable ways of establishing their residential developments. LED lighting within houses and streetlights are being considered by more RPDs to make these developments more environmentally friendly. A new trend is also on the rise, where RPDs are employing locals to assist with the

construction of the residential estates or for the installation of extras within the houses/units. The research found that social integration and empowerment has a direct positive influence on the economic bottom line of the company.

### **6.6.3 Conclusion of results**

From the research it can be seen that the triple bottom line has had a significant influence on RPDs' business models. The social-, environmental- and economic value are all clearly considered throughout the entire residential development process. The trend towards lifestyle residential estates is a popular model and addresses the need for the triple bottom line. They have created sustainable residential developments with various recreational activities (like walking trails), shops, gyms and restaurants. These developments have become self-sustaining and even created some jobs within the estates. RPDs have increased their economic bottom lines with these desirable estates by raising the prices per unit; increased the social bottom line through the creation of jobs with the addition of restaurants, shops and gyms; as well as increased the environmental bottom line by installing LED streetlights and establishing tranquil parks and walking trails within these estates.

## **CHAPTER 7: CONCLUSION**

### **7.1 Introduction**

This research paper aimed at understanding business model innovation for residential property developers in Gauteng and the influencing factors for success within these innovation processes. This chapter summarises the main theoretical findings as presented in Chapter 5 and Chapter 6. Using these findings, a guiding value adding factor framework is presented to assist residential property developers (RPDs) in identifying the areas necessary for innovation within their business models. The aim of the value adding factor framework is to provide insight for residential property developers on the innovation processes required within “boom” and “bust” markets, especially during tough economic times and unstable political environments, when financial institutions are cautious of investing in property.

A discussion on the recommendations for management and residential property developers in general follows the summaries of the theoretical findings. This chapter also discusses the limitations of the study and recommends areas for future research based on the findings from this research.

### **7.2 Principal findings**

The research aimed to answer the following five questions:

- What role does financial institutions play in the success of residential property developers’ businesses?
- How has the concept of sustainability influenced the formulation of residential property developers’ business models?
- How do residential property developers innovate their business models?
- What influence does closed innovation as opposed to open innovation have on residential property developers’ business models?
- How does the triple bottom line affect residential property developers’ business models?

The findings to these research questions, along with their insights, are discussed in the sections that follow.

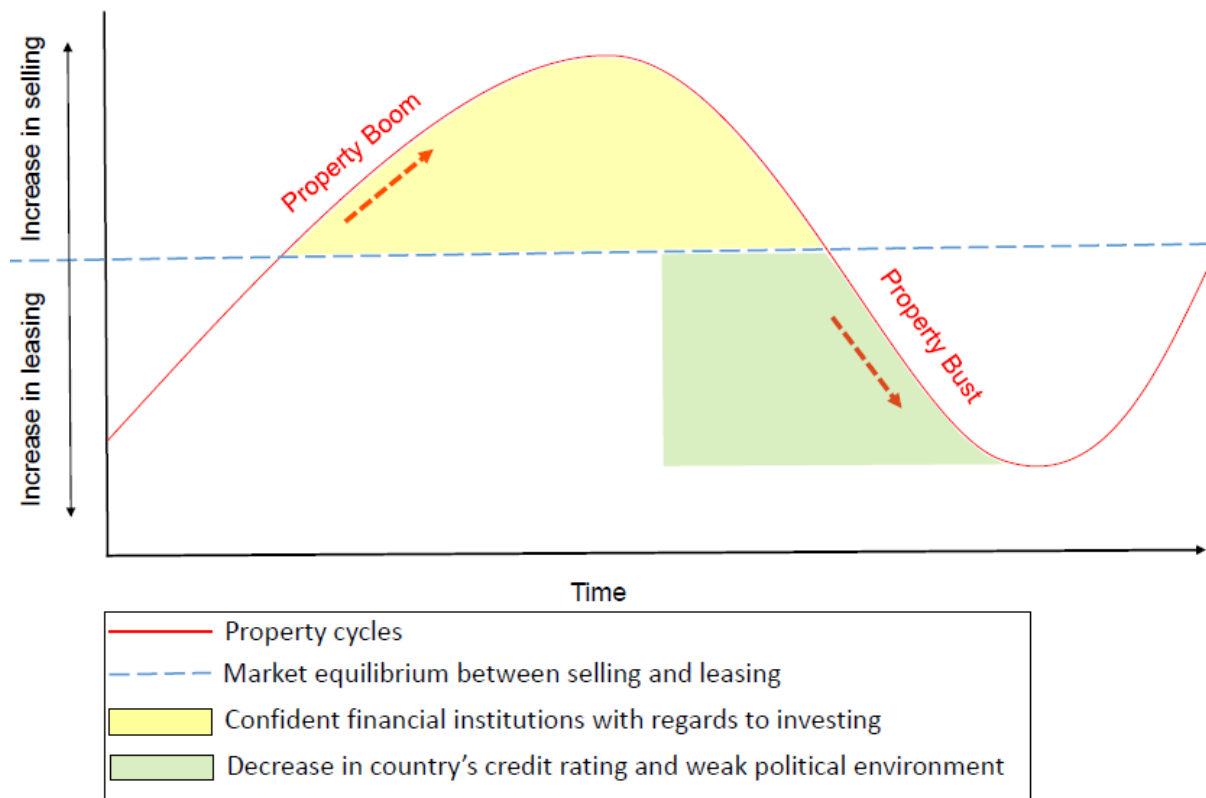
### **7.2.1 Financial institutions are the key partners in residential property developers' success**

The findings showed that financial institutions play an irreplaceable role as partners in success during the formulation and execution of a residential property developer's (RPD's) business model. The importance of financial institutions' role in the residential property development industry is supported by Bryson and Lombardi (2009) who argued that the difficulty in property development lies in the acquisition of sites, since this requires a large financial investment. RPD's require assistance from financial institutions to cover the initial upfront costs involved with services installations and construction. Even once a developer has generated a large profit over a number of years and operates with large cash flows, they still make use of financial institutions for funding on projects.

The study confirmed that financial institutions lose confidence in the market during economic downturns and become very strict on lending rates and regulations, which makes it difficult for potential buyers to obtain bonds. This places a large amount of pressure on RPDs as they struggle to sell their units and it forces them to change their business models from selling to leasing. Gaffney (2015) and Holgersen (2014) argued that financial institutions become stricter on lending to investors and interested home owners during a bust cycle. The business model is therefore controlled by the market. During a residential boom RPDs are more prone to sell their units and during a bust cycle, they are more likely to lease their units. As explained in the findings and discussions, the international credit downgrade and the political situation in South Africa were the largest influencing factors on financial institutions' willingness to invest.

The researcher contributed to theory in a South African context, with the compilation of the diagram below. It is a basic illustration of the South African residential property market with a market equilibrium line, where residential sales and rentals are equally weighted in the market. As soon as a property boom occurs, financial institutions gain confidence in the markets and relax the lending requirements. This enables more people to obtain bonds from the banks and property sales subsequently increase, while rentals decrease. During a credit rating downgrade and a weak political environment, financial institutions lose confidence in people to honour their bonds payments and become stricter on lending regulations. With a reduction in bonds being issued, residential property sales decrease significantly, while rentals (leasing) increase.

**Figure 21: The influences on the residential property market**



### 7.2.2 **Residential property developers regard sustainability as vital to their business' survival**

Two forms of sustainability were discovered by the research, known as “company sustainability” and “project sustainability”. Company sustainability referred to the activities necessary for a company to survive tough economic times, while project sustainability referred to attributes within a residential development, necessary for the estate’s long-term sustainability.

The findings supported the importance of sustainability within the residential development companies’ longevity as well as the residential townships they develop. This validates literature stating that the concept of sustainability in developments have become an increasing consideration, since value and profitability are some of the main factors that drive the business models of companies today (Bryson & Lombardi, 2009). Also, Bryson and Lombardi (2009) as well as Krueger and Buckingham (2012) believed that the value of a company can be increased by developing cities in a more sustainable way. The key activities identified by the research that support sustainability within a company include brand awareness; marketing

and sales; product design and packaging; execution and delivery of product; pricing; and market research. This provides a guide for RPDs to implement within their companies, to increase sustainability within their market.

The research further discovered that the sustainability of projects increased due to proximity to existing public infrastructure, such as schools, shops, churches and places of work. The factors that were identified as the largest contributors in sustainable residential developments included access to public transport; convenience; recreational facilities; security; location; and environmentally friendly development. Location is viewed as an overarching factor as supported by Charnock et al. (2014). Herbert and Murray (2015) as well as Krueger and Buckingham (2012) noticed that property developers have changed their business models in innovative ways to integrate corporate, commercial, residential and recreational uses within a single development; to create more self-sustaining cities. Various land uses are mixed together in such a way that people could live, work and shop in the same area, within close proximity of each other to promote compact cities around urban centres of employment (Echenique et al., 2012).

### **7.2.3 Innovations for residential property developers mostly occur within products and processes**

The research found that RPDs mostly focus on product and process innovations rather than entire business model innovations. Hargadon (2015) argued that most companies struggle to innovate their business models because they cannot build new capabilities, whether it is through open or closed innovation. These product and process innovations are known as sustaining and commercial innovations within the literature (Bereznoi, 2015; Bozkurt & Kalkan, 2014; Brown & Anthony, 2011; Evans et al., 2017). Complete business model innovation does occur from time-to-time, however, diversification seems to be one of the largest business model innovations that RPDs had to adopt during the economic downturn. Diversification within RPDs' business models changed the cost structure, revenue streams, channels, customer segments and activities. Gassmann et al. (2014) and Wrigley et al. (2016) mentioned that companies cannot rely on existing business models to survive in the future, therefore they must innovate their business models regularly to ensure long-term competitive success.

The research further discovered that technological advances seem to be the latest large business model innovation adopted by RPDs. The use of electronic management systems designed for each residential estate, is changing the way RPDs conduct market research to amend their business models, as supported by Brown and Anthony (2011), Hargadon (2015)



and Evans et al. (2017). Electronic management systems capture live data of residents' maintenance issues and keep an information database of all the residents within an estate. Baden-Fuller and Haefliger (2013), Bereznoi (2015), Berends et al. (2016) as well as Bashir and Verma (2017) supported these findings and stated that companies would have to change their business models with technological advances in an industry to incorporate these features in their business plans and increase customer value for an improved competitive advantage.

#### **7.2.4 Residential property developers strive towards closed innovation processes**

The research indicated that all residential property development companies make use of “outside-in open innovation” (Chesbrough, 2012) to some extent. “Outside-in open innovation” involves the consultation of external professionals for their knowledge on specific projects. However, RPDs intend on moving away from open innovation. The findings indicated that the RPDs with larger cash flows (as stated by them) rather apply closed innovation processes, while the RPDs with smaller cash flows make use of open innovation processes. The findings showed that closed innovation processes could be costly due to the appointment of various professionals, rather than outsourcing for external knowledge. As mentioned by Saebi and Foss (2015) as well as Evans et al. (2017), there are conflicting views on whether open innovation is beneficial to a company's business model. Some believe that companies tend to come up with the same innovations due to their knowledge base, therefore they would accelerate innovations within the company if they used knowledge external to the company (Saebi & Foss, 2015). Teece (2016) supported the notion of open innovation by stating that the collaboration with key partners within the company's business environment is beneficial to the success of the innovation process, but pointed out that open innovation can fail if the partners are lazy and make little-to-no contribution to the innovation process.

The study discovered a new trend towards RPDs' closed innovation approaches. As mentioned in 7.2.3 above, some of the RPDs are developing electronic management systems to obtain real-time market data with regards to their demographics, issues they might have within the estate or even snagging problems; which the residents can log on the system. The electronic management systems enable RPDs to amend their business models in innovative ways by studying the data they obtain from their residents. This disruptive innovation within RPDs' business models could gain a major competitive advantage as a first mover of technology or process (Brown & Anthony, 2011; Evans et al., 2017).

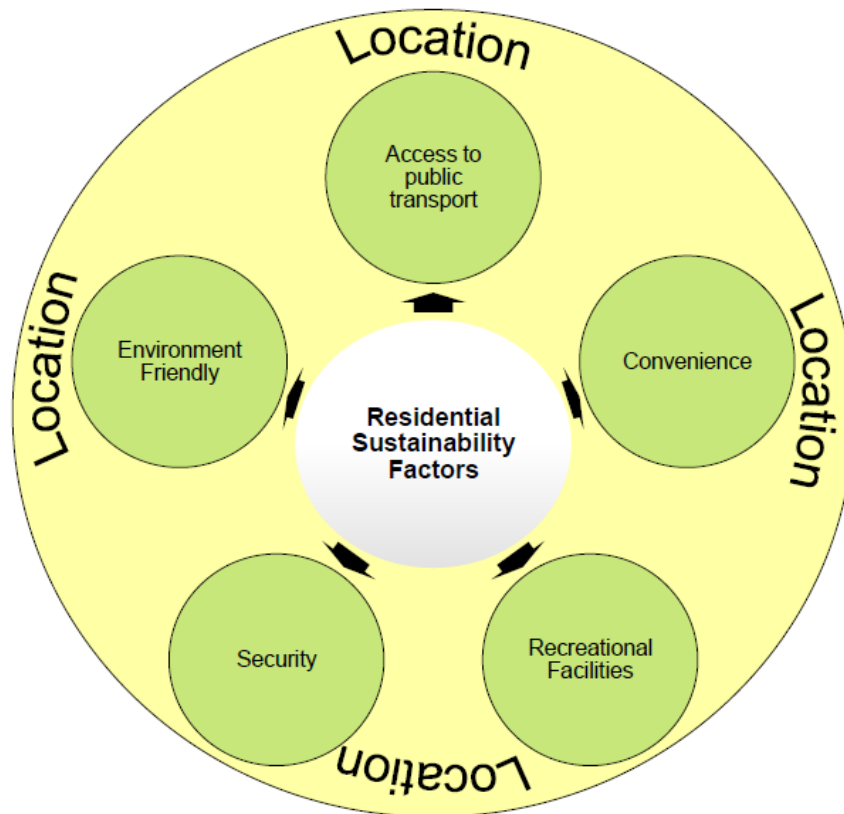
### **7.2.5 Residential property developers address the triple bottom line through the creation of lifestyle estates**

The findings supported the importance of the triple bottom line and showed the significant influence it had on RPDs' business models. The social-, environmental- and economic value are all clearly considered throughout the entire residential development process. The findings were supported by Joyce and Paquin (2016) as well as Evans et al. (2017) in their theory that companies change their business models to generate a triple bottom line, by focusing on the economic benefits, as well as the environmental and social value creation determined by the company's actions. The trend towards lifestyle residential estates is a popular model and addresses the need for the triple bottom line. They have created sustainable residential developments with various recreational activities, such as walking trails, shops, gyms and restaurants. These developments have become self-sustaining and even created some jobs within the estates. RPDs have increased their economic bottom lines with these desirable estates by raising prices per unit. They have also increased the social bottom line through the creation of jobs with the addition of restaurants, shops and gyms. Lastly, they have increased the environmental bottom line by installing LED streetlights and establishing tranquil parks and walking trails within these estates. Sustainable value forms the core of the triple bottom line (Evans et al., 2017), however Evans et al. (2016) believed that there is a lack of clarity, consensus and consistency regarding the terms "business model", "business model innovation" and "sustainable business models". The lack of triple bottom line value becomes clear in the findings, since there are still no signs of the lifestyle concept within affordable housing in Gauteng.

### **7.2.6 Conclusion**

The findings of the study contributed to the academic literature on the innovation processes involved in business models of residential property developers. A contribution was made with the diagram in Research Question 1, explaining the influences on the residential property market in South Africa and how it affects the business models of residential property developers. The literature explained some of the factors involved in sustainable residential developments, but there are no comprehensive models presenting the most influential factors for innovation in sustainability. A contribution is made to the literature with the following model illustrating the sustainability factors required for a residential development.

**Figure 22: Value-adding factor framework for sustainability**



### 7.3 Recommendations for management

For managers to prepare themselves for the issues experienced in South Africa, it is recommended that they diversify their business models to incorporate rental stock and unit sales. The ratio between rental stock and sales will be determined by the economic and political situation of the country, since these elements determine financial institutions' ability to lend money for investment purposes.

For management to ensure the sustainability of their companies, factors such as brand awareness; marketing and sales; product design and packaging; execution and delivery of product; pricing; and market research can be amended and innovated for continued success. Further to sustainability, managers can consider using the value-adding factor framework as a guide to create sustainable residential townships and increase the triple bottom line.

The residential market is a changing place and for management to have a competitive advantage, they need to be innovative in their approaches and designs. Technological advances are changing the way residential townships are designed. It is recommended that

managers incorporate technology management systems into the design of their estates, to increase their competitive advantage and understand their market.

#### **7.4 Limitations of the study**

While the study produced some interesting findings, either confirming or building on existing literature, it is not without its limitations as discussed below.

The research is specifically limited to RPDs. The study therefore excludes the views and opinions of commercial, industrial and retail developers. The research is geographically limited to the boundaries of Gauteng and excludes any developers from the rest of South Africa or international developers.

The semi-structured interviews were conducted with the key decision-makers in each company, excluding other employees' views and opinions on the companies' innovation processes. The interviews were also conducted with RPDs currently in business. The opinions of failed or liquidated RPDs were not considered, which might have changed the outlook on innovations necessary for continued business.

Documents related to financial information from each RPD were excluded from this study. Therefore, the information provided with regard to cash flows cannot be verified.

#### **7.5 Suggestions for future research**

Based on the theoretical findings and the limitations discussed above, the following areas for future research can be suggested.

This study was based on all the RPDs in Gauteng. The study can be focused on a specific sector of RPDs to determine the business model innovation involved within that specific sector of residential property development. The various sectors include affordable housing, medium-income housing, high-income housing, retirement villages and student housing. The study can be focused even further on low density versus high density housing in any of those sectors.

The study was based on RPDs in Gauteng with the various issues that South Africa faced, such as the international credit downgrade and political tensions within the country. The study can be compared to other African countries with similar issues or it can be compared to developed countries outside the borders of the African continent.

Since the study only involved interviews with senior management, a comparative study can be conducted between the senior management and the employees of a company to determine the varying views on the company's business model innovation. Another comparative study can be conducted between all the failed or liquidated RPDs and the RPDs currently in business, to determine whether they have conflicting or supportive views on business model innovation.

Further research is necessary on business model innovation for RPDs, with the comparison of financial statements. The financial statements could provide a different view on the various RPDs' level of success. Further to this study, the various residential development companies' staff compositions can be made available, to determine the size of each company in comparison.

## **7.6 Summary**

This study produced various findings that build on the theory of business model innovation for residential property developers. The research emphasised the changing residential property market and stressed the importance of business model innovation for a competitive advantage. The areas for innovation within a company as well as within a project were identified to ensure increased sustainability within the residential market. From the findings the value-adding factor framework was created as a guide to create sustainable residential townships in the future.

This research made theoretical and practical contributions to the understanding of business model innovation for residential property developers in Gauteng. Further research can be done on business model innovation for residential property developers to increase the understanding on some areas not covered by this study.

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**Appendix 1: Letter of consent and semi-structured interview schedule**

<b>PARTICIPANT DETAILS</b>	
Name:	
Company Name:	
Position:	
<b>INFORMED CONSENT AND OPENING</b>	
<p>Thank you for giving me the opportunity and time to conduct this interview today. I am doing research on business model innovation of residential property developers in Gauteng. Your insights with regards to the subject matter will be of significant value to the understanding of challenges and processes involved with business model innovation within the residential property market. I would like to use this information to provide insights into the level of innovation being applied within the residential property market and to determine whether significant differences in innovation is applied throughout the business models of various residential property developers.</p> <p>The interview will last approximately 60 minutes and will be recorded with your permission. The interview and data will be kept confidential. Your name and details will be kept anonymous and reference will be made to you as developer # (1, 2, 3, etc.).</p> <p>Your participation is voluntary and you can withdraw at any time without penalty. If you have any concerns, please contact me or my supervisor. Our details are:</p>	
Researcher Name:	Derik Cronjé
Researcher E-mail:	24043347@mygibs.co.za
Researcher Phone:	083 502 6144
Supervisor Name:	Brett Wilks
Supervisor E-mail:	brett.wilks@sametal.co.za
Supervisor Phone:	083 309 5595
Signature of Participant:	_____ Date:_____
Signature of Researcher:	_____ Date:_____

## BODY OF INTERVIEW

### A. GENERAL INFORMATION

1. Please can you briefly outline your job role and responsibilities?

2. How long have you been working in the residential property industry?

3. Where did you study and where are you from?

4. How are you finding business compared to the last couple of years?

### A. BUSINESS MODEL INNOVATION

5. How old is your company?

5.1 What made your company successful when you just started out?

6. Where there any things that hindered your success throughout the years?

6.1 What did you do during those times?

6.2 What do you offer in terms of:

- Selling/leasing of units? Full/sectional title units? Houses/flats?

6.3 Who generally buys your one / two / three / four bedroom units?

- Is your customers the same or do they vary?

- Why do you enjoy selling in this market?

7.

7.1 Throughout all the years, were there any other partners or companies who you worked with that made your successes more achievable?

7.2 What would you say are the main activities that contribute to the value of the firm?  
(Buying of new land; Pricing of units; Marketing; etc.)

7.3 Why do you think people want to buy your units? What makes your units so desirable?

7.4 Do you have any after-sales relationships with your customers like an e-mail system or feedback reports?

7.5 Do you use the same suppliers of building material and construction or do you prefer to have more than one? What are the reasons for this?

8. How have you dealt with the changing residential market over the years in terms of what people want? Do you try to come up with new ideas every now and again (building styles) or do you wait to see what the market demands?



8.1 Do you generally just have residential units in your developments or do you mix it up with other uses such as shops, a gym, parks, etc.? Do you change this up from development to development?

9. What do you feel keeps you ahead of your competitors?

## **CLOSING**

10. I appreciate the time you took for this interview.

## **Appendix 2: Atlas.ti list of codes**

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- Affordable housing market – price sensitive
- After-sales relationship
- Assistance and education in the buying process
- Barriers to entry – High
- Barriers to entry – Low
- Company – Age
- Company – Culture
- Company – Main Focus – Leasehold
- Company – Main Focus – Rentals
- Company – Main Focus – Sell
- Company – Position (CEO, CTO, MD)
- Company – Role and responsibilities
- Competitive advantage – Access to finance / capital
- Competitive advantage – Diversification
- Competitive advantage – Location
- Competitive advantage – Lots of available land
- Competitive advantage – Planning five years in advance
- Competitive advantage – Pricing
- Competitive advantage – Quality of product
- Competitive advantage – Service and after-sales service
- Competitive advantage – Small company / quick decision making
- Customer type
- Desirability of your residential developments
- Factors of success when you started out – Available bulk infrastructure
- Factors of success when you started out – Cash flow

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- Factors of success when you started out – Diversification
  - Factors of success when you started out – Focus
  - Factors of success when you started out – Housing shortage
  - Factors of success when you started out – Lack of competition
  - Factors of success when you started out – Location
  - Factors of success when you started out – Mentors
  - Factors of success when you started out – Quality product
  - Factors of success when you started out – Relationships / Networking
  - Factors of success when you started out – Serviced land
  - Factors of success when you started out – Small staff component with small overheads
  - Factors of success when you started out – Stock / Land
  - Factors of success when you started out – The right people
  - Factors that hindered success – Access to finance
  - Factors that hindered success – Cash flow
  - Factors that hindered success – Customers qualifying for bank bonds
  - Factors that hindered success – Global financial crises (property crash) in 2007/2008
  - Factors that hindered success – Incompetent councils, bureaucracy and corruption
  - Factors that hindered success – Interest rates
  - Factors that hindered success – Liquidity
  - Factors that hindered success – Market is much more sophisticated (people expect much more than when they started out)
  - Factors that hindered success – NHBRC
  - Factors that hindered success – Purchase price of land
  - Factors that hindered success – Scarcity of land
  - Factors that hindered success – Skills shortage
  - Finance – Banks

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- Finance – Funding
  - Government involvement
  - Houses – Full title
  - Houses – High density / walk-ups
  - Houses – Low density / single stands
  - Houses – Number of bedrooms
  - Houses – Sectional title
  - Houses – Square meterage
  - Important factors for residential developments – Accessibility and transport
  - Important factors for residential developments – Convenience
  - Important factors for residential developments – Feasibility
  - Important factors for residential developments – Location
  - Important factors for residential developments – Recreation
  - Important factors for residential developments – Reputation and track record
  - Important factors for residential developments – Security
  - Individual – Experience in years
  - Individual – Experience specialities
  - Individual – Origin – Place of birth
  - Individual – Qualifications
  - Individual – University
  - Innovation Techniques – Build only a basic
  - Innovation Techniques – Build smaller houses
  - Innovation Techniques – Building infrastructure up front
  - Innovation Techniques – Change from full title to sectional title
  - Innovation Techniques – Creating rental stock
  - Innovation Techniques – Diversification

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- Innovation Techniques – Do everything in-house
  - Innovation Techniques – Electronic banking systems
  - Innovation Techniques – Fix costing with suppliers
  - Innovation Techniques – Freehold
  - Innovation Techniques – Increase and improve after-sales service
  - Innovation Techniques – Increase and improve quality
  - Innovation Techniques – Increasing densities
  - Innovation Techniques – Information management system / IT
  - Innovation Techniques – Integrated housing model (added value to the end user)
  - Innovation Techniques – Managing risks / profits
  - Innovation Techniques – Minimize building costs
  - Innovation Techniques – No transfer duties
  - Innovation Techniques – Pay for deposits instead of stands
  - Innovation Techniques – Production line in residential market
  - Innovation Techniques – Rental / asset management
  - Innovation Techniques – Residents' association
  - Innovation Techniques – Selling serviced stands
  - Innovation Techniques – Selling to a fund
  - Innovation Techniques – Solar
  - Innovation Techniques – South African Residential Developers' Association
  - Innovation Techniques – Sustainability
  - Innovation Techniques – Transport
  - Innovation Techniques – Use local labour for the extras
  - Interesting quote
  - Issues – Comfort zone
  - Issues – Cooperation of Councils

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- Issues – Decreasing customer base
  - Issues – Developers delivering the same product to the same market over and over (not diversifying)
  - Issues – Environmental considerations
  - Issues – Expensive levy payments
  - Issues – International credit downgrade
  - Issues – Monopoly in steel industry (difficult to determine prices)
  - Issues – Parking requirements
  - Issues – Political and economic environment
  - Issues – Proximity of land
  - Issues – Rates and Taxes
  - Issues – Rising costs of bulk contributions
  - Issues – Slow timelines for servicing of a township
  - Main activities – Brand awareness (good service)
  - Main activities – Design and packaging of product / unit
  - Main activities – Execution and delivery of product / unit
  - Main activities – Marketing and sales
  - Main activities – Pricing
  - Main activities – Understand your market
  - Partners in success
  - Reasons why you enjoy selling in this market
  - Residential – Affordable housing
  - Residential – Bonded housing
  - Residential – Change in the market
  - Residential – Demand
  - Residential – Lifestyle estate

- 
- Residential – Mixed Use
  - Residential – Rental market
  - Residential – Selling market
  - Residential – Single Use
  - Residential – Trends
  - Residential market – Decreased
  - Residential market – Increased
  - Target market – High income market (LSM 9-10)
  - Target market – Low income market (LSM 4-6)
  - Target market – Medium income market (LSM 7-8)
  - Team – Construction
  - Team – Professional
  - Team – Property management agent

## Appendix 3: Gibs ethical clearance confirmation

# Gordon Institute of Business Science

University  
of Pretoria

03 August 2017

Johannes Cronje

Dear Johannes,

*Please be advised that your application for Ethical Clearance has been approved.*

*You are therefore allowed to continue collecting your data.*

*We wish you everything of the best for the rest of the project.*

*Kind Regards*

GIBS MBA Research Ethical Clearance Committee