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The role of heuristics in entrepreneurial decision-making

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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.

29 January 2014

ABSTRACT

Entrepreneurs have to constantly make decisions about the various opportunities available to them. Bad decisions can lead to the failure of a business while good decisions will enable the business to grow and make a positive contribution to society and the economy. Understanding how successful entrepreneurs make decisions about business opportunities will assist other entrepreneurs because this knowledge will equip them to run their own businesses more successfully.

In this particular research study, twelve successful entrepreneurs were interviewed and asked about the way in which they make decisions about business opportunities. Through a process of thematic analysis, the data collected was woven into an innovative Grounded Theory that identified and explained the heuristics entrepreneurs use when making decisions about opportunities.

Seven heuristics emerged from the data and were ordered according to the frequency of observation. The two most common heuristics included inputs required/outcomes desired and formal/emotional processes. The five less frequent heuristics were classified as influence, environmental factors, risk and control, commitment and balance.

An additional insight that was gained through the research process was that the entrepreneurial idea itself contributes little to the overall success of the business and an “action-orientated” focus was a far better contributor to ultimate success.

Keywords:

Entrepreneurship; Heuristics; Decision-making; Opportunity Identification & Evaluation

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 at any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Kevin Croft

29 January 2014

ACKNOWLEDGEMENTS

To my fellow students and new friends: Thank you all for your contributions to FT-MBA '13. The support offered was unrivalled by anything I have experienced prior to embarking on this journey.

To my supervisor Jonathan Marks: Thank you for your guidance, insight and expertise in the field of entrepreneurship. I appreciate all the time and effort you invested in aiding me to complete this final stage of the MBA.

To Shiris, Viv, Joey, Celeste and the rest of the GIBS staff that made the journey a smooth and enjoyable ride: Thank you for all your help and always doing a great job.

This research would not have been possible without the twelve entrepreneurs who generously offered their time to be interviewed: Thank you for sharing your experiences. Your knowledge and honesty were instrumental in putting this research together.

To Jenni: Thank you for your patience and understanding over the past year. I know it has been difficult but your support was instrumental in enabling me to be able to do my best.

Most importantly, to my parents, Peter and Angela and my brothers, Anthony and Joel: Thank you for your unwavering support and encouragement throughout the year.

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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Introduction

Five out of seven small businesses in South Africa will fail within the first year of operation, according to Trade and Industry Minister Rob Davies (Kgosana, 2013). The global average for small business failure within the first year is only one out of every two businesses. It is therefore much more difficult to sustain successful entrepreneurship in South Africa.

There are principally two major problems with the level of entrepreneurship in South Africa. Firstly, according to the Global Entrepreneurship Monitor, as depicted in Table 1 below, only 7% of South Africans are involved in early stage entrepreneurial activity where the average for Sub-Saharan African countries is 28% (Turton & Herrington, 2012).

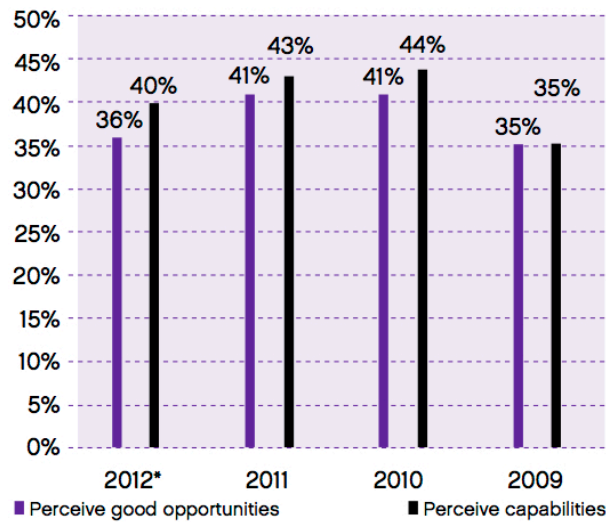
Table 1: Prevalence rates of entrepreneurial activity

Country	Nascent entrepreneurship rate	New business ownership rate	Early-stage entrepreneurial activity
Angola	15%	19%	32%
Botswana	17%	12%	28%
Ethiopia	6%	9%	15%
Ghana	15%	23%	37%
Malawi	18%	20%	36%
Namibia	11%	7%	18%
Nigeria	22%	14%	35%
South Africa	4%	3%	7%
Uganda	10%	28%	36%
Zambia	28%	15%	41%
Average	15%	15%	28%

Source: Global Entrepreneurship Monitor 2012

Interestingly, the problem is not that South Africans are unaware of opportunities or that they do not believe they are capable of taking advantage of them. This is evident from the information displayed in Figure 1 where in 2012, 36% of South African adults perceived good business opportunities and 40% of South African adults believed they possessed the necessary capabilities to pursue a perceived business opportunity.

Figure 1: Perceptions of good opportunities and capabilities



* Read as: In 2012, 36% of the adult population perceive a good business opportunity, and 40% believe that they have the skills to pursue a business opportunity

Source: Global Entrepreneurship Monitor 2012

The second problem is that out of those entrepreneurs that do attempt to start a business, the vast majority of them fail. The research study aimed to provide entrepreneurs more effective ways of making better business decisions to increase the likelihood of success.

The way in which entrepreneurs make decisions continues to be an actively debated domain within academic literature. Baron (2004) suggested that research be done regarding the way entrepreneurs utilise heuristics when making decisions: “In addition, it is possible that successful entrepreneurs are more proficient than less successful ones at formulating effective heuristics—mental aids for making fast but accurate decisions. Entrepreneurship

researchers may well wish to investigate these predictions, derived from a cognitive perspective.” (p. 235). Eight years later, Welpé, Spörrle, Grichnik, Michl and Audretsch (2012) made a similar suggestion when they stated that research should be done on the “cognitive and emotional processes” that entrepreneurs are confronted with when facing multiple competing opportunities (p. 2).

The research study analysed some of these cognitive and emotional processes in the form of heuristics (mental shortcuts) that entrepreneurs make use of when making decisions about business opportunities.

One of the largest problems facing South Africa is the level of unemployment. Statistics South Africa has released the official unemployment statistic as being 25,2% (2013). The actual level of unemployment in the country is much higher than this as the official statistic only takes into account unemployed people who are actively seeking work and does not include discouraged persons who have given up looking for work. Improved levels of entrepreneurship could be a solution to this problem, as Gohmann and Fernandez suggested that entrepreneurship has an effect in reducing unemployment in the long term (2014). Further research conducted by Acs, Parsons and Tracy suggested that “high-impact firms” or “Gazelles” are almost completely responsible for the level of growth in employment within an economy (2008).

1.2 Research Motivation

Being able to determine how and why entrepreneurs make the decisions they do regarding the opportunities available to them and what effect those choices have on the success or failure of their businesses will go a long way towards better predicting the possibility of ultimate success for new ventures. When entrepreneurs make better decisions around opportunities, it is expected that both nascent and experienced entrepreneurs are impacted. Therefore any advance in the predictability of success for entrepreneurs will have a significantly positive effect on the economy because employment levels will increase. As the current study is focused on successful entrepreneurs, being

those that are already running their own businesses, unemployment is not a significant concern for them.

However, the findings of the study will be applicable across all levels of entrepreneurship. Nascent and potential entrepreneurs who are able to make better decisions will increase their chances of success. Experienced entrepreneurs will be able to further grow their businesses, which implies the employment of more people and a greater amount of taxes being paid to the states in which they operate. This is consistent with Van Praag and Versloot's (2007) empirical study that suggested there are positive links between entrepreneurial activity and economic growth.

Townsend, Busenitz and Arthurs (2010) suggested that when entrepreneurs are confident in their ability to perform entrepreneurial tasks, the likelihood of them actually initiating a new venture is higher. As entrepreneurship is “concerned with the discovery and exploitation of profitable opportunities” (Shane & Venkataraman, 2000, p. 217), the more confident entrepreneurs are about their ability to identify and execute on opportunities, the more likely they are to start a new venture.

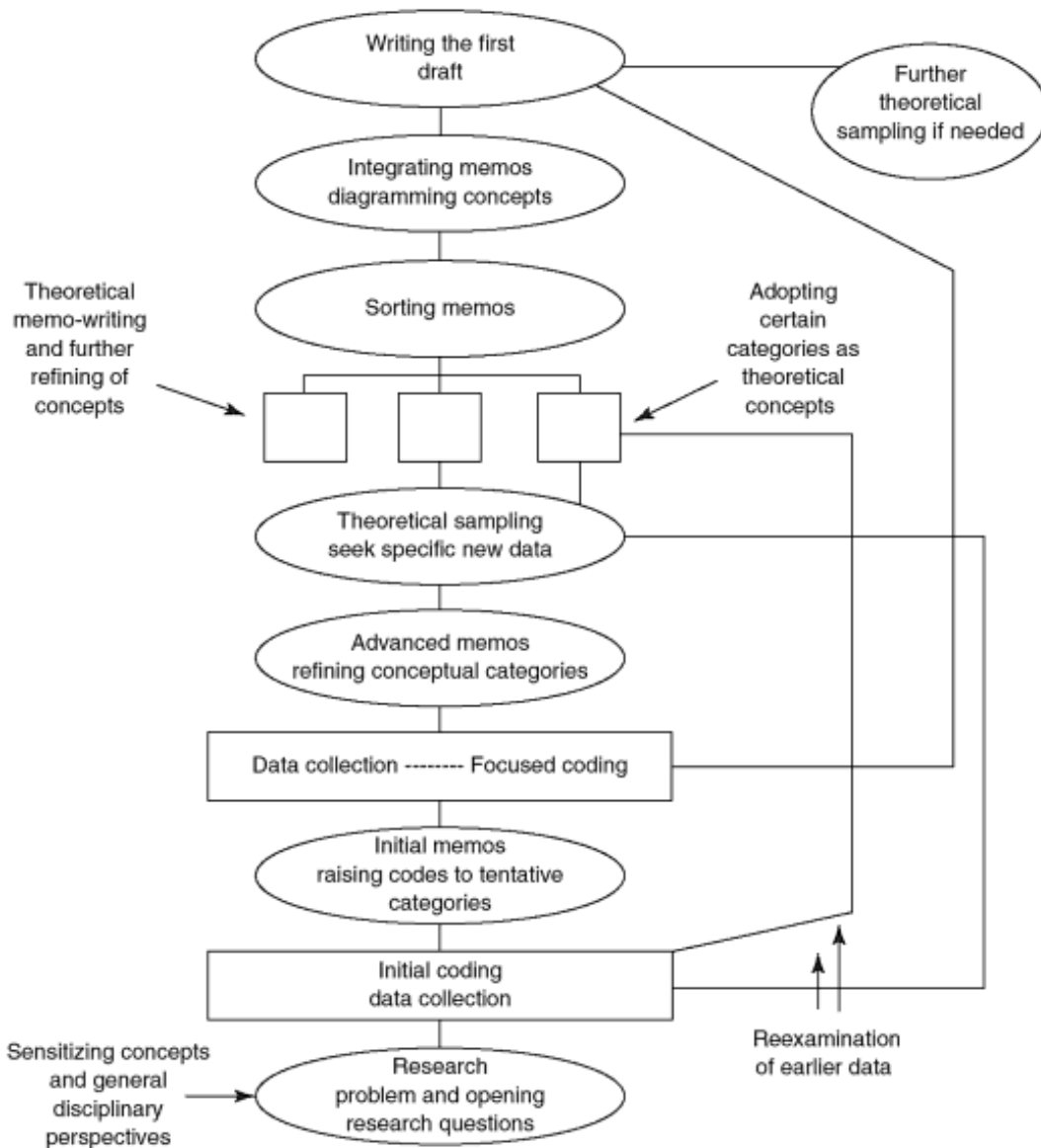
1.3 Research Questions

The primary question that this research aimed to address is “in what way do successful entrepreneurs employ heuristics when making decisions about business opportunities?”

1.4 Research Methodology

Grounded Theory was chosen as the most appropriate methodology in order to achieve the stated research objectives as this allowed the researcher to approach the problem without any preconceived ideas and discover the most pertinent issues and phenomena with as little bias as possible. The diagram on the following page depicts the Grounded Theory process as illustrated by Charmaz (2006).

Figure 2: The Grounded Theory process (Charmaz, 2006)



From Figure 2, it is evident that the process of doing research utilising the Grounded Theory methodology is an iterative one. Once the research problem and research questions have been decided, the process of data collection and analysis occur concurrently. Data is collected until the point of saturation, where no additional theoretical categories are evident within the data.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced the research problem to be addressed, provided a background to substantiate the necessity to conduct this research and introduced the Grounded Theory methodology as the means to achieve the research objectives. The following chapter examines and reviews the existing literature relevant to the current study.

The current study is aimed at understanding the role of heuristics within the decision-making processes that successful entrepreneurs employ concerning opportunities. A few core concepts were identified as being central to the current study:

- The composition of a successful entrepreneur;
- Entrepreneurial opportunity identification and exploitation; and
- The process of decision-making; as well as
- Heuristics.

Literature pertaining to each of these concepts was reviewed and analysed to assist in the formation of solid and relevant research questions.

Entrepreneurs and entrepreneurial opportunities fall within the domain of entrepreneurship literature, while decision-making and heuristics have been thoroughly researched in the psychology domain of academic literature. As such the literature review that follows has been constructed using arguments and concepts from both domains. Consistent with the Grounded Theory methodology, existing theory was sought to substantiate or disprove the findings of the study in conjunction with data collection and analysis.

2.2 Entrepreneurs

A brief analysis of the best-fit definition and scope of what an entrepreneur is for the purpose of the current study revealed the seminal article by Shane and Venkataraman (2000) who defined the field of entrepreneurship research as “the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited” (p. 218). This definition can be fragmented into two distinct parts: the first includes elements related to the entrepreneur (‘how’, ‘by whom’) and the second refers to the concept of opportunities. Examining the term *entrepreneur*, there is no consensus within the literature of an agreed upon definition (Howorth, Tempest, & Coupland, 2005; Shane, Locke, & Collins, 2003). The Global Entrepreneurship Monitor Report defined potential entrepreneurs as “those who perceive good business opportunities AND believe that they have entrepreneurial capabilities” (Turton & Herrington, 2012, p. 6). This definition is too broad for the purposes of the current study, as the current research study aimed to examine entrepreneurs with some degree of success. Entrepreneurs are therefore defined as founder managers for the purpose of the current study (Bryant, 2007; Forbes, 2005).

2.2.1 The composition of a successful entrepreneur

With the aim of the current study being to determine the role of heuristics in the decision-making processes of successful entrepreneurs, a definition of successful entrepreneurs is necessary.

Many studies have been done that investigate the characteristics that successful entrepreneurs possess. Buttner and Rosin (1988) listed the following nine characteristics they believed successful entrepreneurs possessed: “leadership, autonomy, propensity to take risks, readiness for change, endurance, lack of emotionalism, low need for support, low conformity and persuasiveness” (p. 249). A more recent study conducted on Chinese entrepreneurs revealed that characteristics of successful Chinese entrepreneurs included creativity, innovativeness, openness and perseverance

(Rozell, Meyer, Scroggins, & Guo, 2011). Apart from these characteristics, there are also some cognitive factors that are associated with successful entrepreneurs that include perception of risk, counterfactual thinking and processing style (Baron, 2004).

While various attributes associated with successful entrepreneurs have been discussed, these do not specifically address the way one would measure an entrepreneur to determine whether or not they are successful. The following section analyses the outcome of being a successful entrepreneur so that reverse logic may be applied to determine what constitutes a successful entrepreneur.

2.2.2 Entrepreneurial business performance

There are many ways to measure the performance of companies (Neely, Gregory, & Platts, 2005). Among the various measurement methods, public companies, with freely available information are evaluated based on the movements in their share price. Entrepreneurial start-up companies, due to their smaller nature, need to be measured using different criteria (Audretsch & Link, 2012; Rauch, Wiklund, Lumpkin, & Frese, 2009).

According to Acs et al. (2008) high-impact firms are the largest contributors to increased employment while maintaining significant revenue growth. Therefore a possible measure of entrepreneurial success could be inclusion within the *high-impact firms* category of businesses. However, the average age of a high-impact firm is twenty-five years, demonstrating a significant time gap between early stage start-ups and high-impact firms (Acs et al., 2008).

Reid and Smith (2000) analysed three criteria, being employment growth, return on capital and labour productivity to create an ordinal ranking of new business performance. Regardless of the entrepreneurs' intentions, the only aim that has a significant impact on performance is the pursuit of the highest return on investment (Reid & Smith, 2000).

In a study conducted by Gorgievski, Ascalon and Stephan (2011), entrepreneurs were directly questioned about the criteria that defined their success. The following rank-ordered table was constructed:

1. Personal satisfaction
2. Profitability
3. Satisfied stakeholders
4. Balance between work and private life
5. Innovation
6. Firm survival
7. Utility
8. Contributing back to society
9. Public recognition
10. Growth

This finding revealed that entrepreneurs define their own success based on feelings of personal achievement and satisfaction, rather than on the performance of the business itself, even though this also plays a role.

2.2.3 Differences between male and female entrepreneurs

There are many studies that sought to determine the differences between male and female entrepreneurs. One such difference as discovered by Verheul, Carree and Thurik (2009) is that women entrepreneurs tend to invest less time in their businesses than male entrepreneurs do. This agrees with DeMartino and Barbato's (2003) earlier study that found that female entrepreneurs sought flexibility and balance while male entrepreneurs wanted to create wealth.

Female entrepreneurs also tend to experience greater perceived financial constraints with regard to access to finance for their businesses (Kwong, Jones-Evans, & Thompson, 2012). Klapper and Parker (2011) found that female

entrepreneurs are more concentrated in labour intensive sectors while male entrepreneurs are more prevalent in capital intensive manufacturing type businesses.

Apart from the actual differences between male and female entrepreneurs there are also a host of perceived differences. An interesting study conducted by Buttner and Rosen (1988) revealed that bank loan officers perceived women entrepreneurs as lacking the characteristics of successful entrepreneurs. These perceptions contradict the position of Sexton and Bowman-Upton (1990) who found that while differences do exist, they should not affect the entrepreneurs' abilities to manage their businesses.

However, while these findings suggest that there are both significant perceived and actual differences between male and female entrepreneurs, many of these results could be attributed to faulty research practices (Ahl, 2006).

2.3 Opportunity Identification, Evaluation and Exploitation

The concept of opportunity is central to entrepreneurship (Short, Ketchen, Shook, & Ireland, 2010). The researcher has fragmented the concept of opportunity into three distinct elements:

- Opportunity Identification
- Opportunity Evaluation
- Opportunity Exploitation

Each of these elements are discussed in more detail in the following sections.

2.3.1 Opportunity identification

There are many studies from academic literature concerned with the concept of opportunity identification. Corbett (2005) examined the link between experiential learning and opportunity recognition and found that the former facilitates the latter. Baron and Ensley (2006) approached opportunity recognition from the

paradigm of pattern recognition. Ozgen (2011) examined opportunity recognition through Porter's (1990) diamond model that analysed the relationship between an individual and his/her environment. All these studies examine opportunity identification from a predominantly causal paradigm. There are few studies outside of the work done by Sarasvathy (2001) that analysed opportunity identification from an effectual perspective. Baker and Nelson (2005) look at the concept of entrepreneurial bricolage whereby entrepreneurs make use of the resources they have at hand to create something from nothing.

There are two common theories regarding how entrepreneurial opportunities are formed; they are either pre-existing and discovered by an entrepreneur or created by the entrepreneur (Alvarez & Barney, 2007; Vaghely & Julien, 2010). Miller (2007) included a third option in form of opportunity recognition and this author compared all three by outlining the characteristics of each in the table reproduced below.

Table 2: Characteristics of three entrepreneurial processes

	Opportunity Recognition	Opportunity Discovery	Opportunity Creation
Environment	Imposed	Selected	Constructed
Risk	Unpredictability	Unknowability	Uncontrollability
Action	Valuation	Search	Causation & Effectuation
Vision	Foresight	Hindsight	Creativity
Logic	Exploitation	Exploration	Identity
Goals	Exogenous	Adaptive	Endogenous

Source: Miller (2007)

Klein (2008) disagreed with Alvarez and Barney's view and offered an alternative that expounded that opportunities are subjective judgments that are imagined by the entrepreneurs.

An investigation into the differences between novice and experienced entrepreneurs by Baron and Ensley (2006) revealed interesting insights into the cognitive processes, both shared and specific to the two groups. As the focus of the current research study is on experienced entrepreneurs, understanding what sets them apart from nascent entrepreneurs is an important point of departure. Baron and Ensley (2006) suggested that while both groups use varying prototypes to connect seemingly unrelated dots, experienced entrepreneurs search for more stable and predictable business ideas when compared to their counterparts. Entrepreneurial alertness was identified by Gaglio and Katz (2001) and was examined as a single heuristic when investigating opportunity identification. Tang, Kacmar and Busenitz (2012) built on the concept of alertness by creating a model containing three elements of alertness: scanning and research; association and connection; and evaluation and judgement. Fiet (2007) argued that a systematic process of searching for opportunities is more effective than alertness for identifying potential business opportunities.

2.3.2 Opportunity evaluation

Once an opportunity has been identified, entrepreneurs need to decide whether it is worth pursuing. While identification and exploitation have been well researched, Haynie, Shepherd and McMullen (2009) suggested that opportunity evaluation research is limited. Foo (2011) conducted two studies that examined the effect of an entrepreneur's emotions on his/her perceptions of the level of risk associated with an opportunity. Gender and the way in which opportunities are presented also play a significant role in how opportunities are evaluated (Gupta, Turban, & Pareek, 2012). A recent study suggested that entrepreneurs use socially constructed rules to determine the attractiveness of a specific opportunity during evaluation (Wood & Williams, 2013). Emotions, moods and feelings also play a role in influencing the evaluation of business opportunities (Baron, 2008; Welppe et al., 2012).

2.3.3 Opportunity exploitation

The final stage in the process involves taking action on the identified and accepted opportunity. Keh, Foo and Lim (2002) found that of the various factors that affect risk perception, an entrepreneur's illusion of control over the situation and their belief in the law of small numbers are the two most influential cognitive biases that affect the evaluation of an opportunity. A further study by Welpel et al. (2012) suggested that from a review of the literature, there are principally four factors that entrepreneurs consider when deciding whether to exploit an opportunity or not. These factors are: (1) the probability of success, (2) the profitability of the opportunity, (3) the amount of personal investment the entrepreneur needs to make, and (4) how long it will take for the opportunity to turn a profit.

Entrepreneurs have been known to make decisions about business opportunities based on their intuition (Burke & Miller, 1999; Dane & Pratt, 2007). The use of intuition is most probably a contributing factor as opposed to the main decision driver (Blume & Covin, 2011).

From a review of the literature it is evident that there are many aspects to consider when entrepreneurs are thinking about opportunities. Apart from being able to identify a possible opportunity, entrepreneurs need to quickly decide whether or not the opportunity is worth pursuing and then how to capitalise on it. This leads into the next theoretical construct to be discussed; how people—and more specifically entrepreneurs—make decisions.

2.4 Decision-Making

The primary theory base for the current study is located in the 'decision-making' literature. How individuals make decisions has primarily been covered within the psychology domain of academic literature. There are many factors that influence the way in which people make decisions. These include past experiences, individual differences and cognitive biases (Bruine de Bruin, Parker, & Fischhoff, 2007; Juliusson, Karlsson, & Gärling, 2005; West, Toplak, & Stanovich, 2008). In addition to these factors, emotional factors and intuition

also play significant roles when individuals make decisions (Fenton-O'Creevy, Soane, Nicholson, & Willman, 2011; Salas, Rosen, & DiazGranados, 2010). Despite the research done on the factors that influence how decisions are made, there are no one-size-fits all models that cover every area of decision-making. According to Nwogugu (2005) decision making is “a multi-factor, multi-dimensional process that often requires the processing of information, and thus, it is inaccurate to impose rigid models in decision making” (p. 150).

2.4.1 The process of entrepreneurial decision-making

The way entrepreneurs make decisions falls within the ambit of entrepreneurial cognition research. Mitchell et al. (2002) defined entrepreneurial cognitions as “the knowledge structures that people use to make assessments, judgments or decisions involving opportunity evaluation and venture creation and growth” (p. 97).

There are many studies that attempt to explain how entrepreneurs make decisions: Shepherd's (2011) multi-level study analysed how individuals made decisions regarding an entrepreneurial task and suggested further research be done to close the gaps between the individual, the decision itself and the context in which the decision is made. McVea (2009) added ethics into the domain of entrepreneurial decision-making and reinforced the personal nature of the relationship between the entrepreneur and the business venture. Sarasvathy (2001) compared two decision-making models; that of causation (whereby the desired result is predetermined and decisions are made on the means necessary to achieve it) and that of effectuation (whereby the means available are the known factors and decisions are made based on possible results obtainable from the said means). Dew, Read, Sarasvathy and Wiltbank (2009) postulated that the difference between expert entrepreneurs and novices is that experts use effectual logic when making decisions and novices use predictive or causal logic. The theory of effectuation describes three sub-categories to the determined set of means an effectuator will utilise when making decisions (Sarasvathy, 2001). At the level of the individual

(entrepreneur), these include: personality traits, tastes and abilities; knowledge corridors and social networks (Sarasvathy, 2001).

The way that entrepreneurs make decisions could be highly influenced by their motivation. Carsrud and Brännback (2011) argued that research into what motivates entrepreneurs is limited and could help explain elements of entrepreneurial behaviour.

As the study of entrepreneurship is closely linked with the concept of risk (Caliendo, Fossen, & Kritikos, 2010; Podoyntsyna, Van der Bij, & Song, 2012; Simons & Åstebro, 2010), it is important to consider the implications of risk being introduced to the decision-making process. Volz and Gigerenzer (2012) distinguished between decisions made under conditions of risk and decisions made under conditions of uncertainty and while the distinction is not relevant to the current study, the basic premise of making a decision without all the possible pieces of relevant information gives rise to various strategies and mechanisms. The particular strategy that this research study attempted to investigate further is that of heuristics.

2.5 Heuristics

Heuristics refers to the mental shortcuts that people take to enable them to make sense of a vast amount of data quickly, although often at the expense of accuracy (Payne, Bettman & Johnson in Maxwell, Jeffrey, & Lévesque, 2011). Heuristics are used in all areas of our lives, whether consciously or subconsciously and act to reduce the amount of effort required to make decisions by excluding part of the information available (Gigerenzer & Gaissmaier, 2011).

2.5.1 Common heuristics

In their seminal article, Tversky and Kahneman (1974) analysed three heuristics that are used when making decisions under conditions of uncertainty: representativeness, availability and anchoring. The representative heuristic

asserts that if a person is faced with options, one of which is recognisable, they will choose the recognised option (Goldstein & Gigerenzer, 2002). The availability heuristic states that individuals base their decisions on the most readily available information (Pachur, Hertwig, & Steinmann, 2012). Lastly, the anchoring heuristic explains that individuals rely too much on a specific piece of information, often the first piece, when making decisions (Furnham & Boo, 2011). Another common heuristic is the affect heuristic. This heuristic explains how individuals make decisions by paying more attention to emotional cues than factual risks and benefits (Finucane, Alhakami, Slovic, & Johnson, 2000; Slovic, Finucane, Peters, & MacGregor, 2007).

2.5.2 Linking heuristics and entrepreneurship

Heuristics have been found to be both beneficial to and allow for bias to (negatively) influence the learning process for entrepreneurs (Holcomb, Ireland, Holmes Jr., & Hitt, 2009). In a related but slightly different field, business angels make use of an elimination heuristic when deciding on which ventures to invest in (Maxwell et al., 2011).

Busenitz and Barney (1997) determined that entrepreneurs are more inclined to make use of heuristics and other cognitive biases when making decisions when compared to managers in large companies. Research regarding how heuristics influence entrepreneurial decisions has been limited to a few pre-determined heuristics (Shepherd, Haynie, & McMullen, 2012; Townsend et al., 2010). Sarasvathy (2001) packaged the Theory of Effectuation as a set of heuristics experienced entrepreneurs utilise to make decisions.

When analysing the reasons for certain entrepreneurial firms' success while many others fail, Eisenhardt (2013) stated that successful entrepreneurial firms "rely on 'simple rules' heuristics to perform significant activities like new product development and internationalization that nonetheless happens often." (p. 805).

2.6 Heuristic Decision-Making

Heuristics are believed to be an inferior method for making decisions, however, in a world where there are many unknowns, they are often more accurate than complex methods for inference (Gigerenzer, Hertwig, & Pachur, 2011). An experiment by Czerlinksi, Gigerenzer and Goldstein (1999) revealed that simple heuristics are able to achieve similar outcomes as more complex multiple regression calculations. Shah and Oppenheimer (2008) posited that the primary function of heuristics is to reduce the amount of effort required to complete a task and have classified earlier research on heuristics into five sub-categories, all of which fall within the ambit of effort-reduction. These categories include: examine fewer cues, reduce the difficulty associated with retrieving and storing cue values, simplifying the weighting principles for cues, integrating less information and examining fewer alternatives (Shah & Oppenheimer, 2008). Research conducted by Gigerenzer and Gaissmaier (2011) concluded that both individuals and organizations often make use of heuristics and that better judgements could be made by ignoring part of the information available. Bingham and Eisenhardt (2011) argued that firms “learn portfolios of heuristics” (p. 1460) and that better heuristics create better strategy.

2.7 Conclusion

The literature review above analysed four concepts integral to the current study; entrepreneurship, business opportunities, decision-making and heuristics. From the entrepreneurship literature a useful definition of what constitutes an entrepreneur was derived and the various measurements of entrepreneurial success were examined. The business opportunity literature analysed the various elements that need to be considered when identifying, evaluating and ultimately exploiting business opportunities. The literature on decision-making examined the factors that individuals consider when making decisions and more specifically how entrepreneurs make decisions. Lastly the concept of heuristics was introduced to the study and a review of the pertinent literature provided a

necessary background and theoretical perspective, through which the current study is analysed.

The current study combines all four of these elements and examines how heuristics are employed by successful entrepreneurs when they make decisions about business opportunities.

CHAPTER 3: RESEARCH QUESTIONS

From a review of the literature it is evident that the field of entrepreneurship is a fiercely debated domain and theories around decision-making and heuristics are relatively abundant. There are however few examples of how the two areas of academic study are interlinked, specifically within an entrepreneurial context. By making use of a Grounded Theory approach, the current research study sought to understand how heuristics were employed by entrepreneurs when making decisions about business opportunities, and to specifically address the following research questions:

3.1 Research Question 1

In what way do entrepreneurs employ heuristics when identifying, evaluating and exploiting business opportunities?

3.2 Research Question 2

In what way do heuristics influence decisions or assist in the decision-making process?

3.3 Research Question 3

What stops entrepreneurs from pursuing identified opportunities?

3.4 Research Question 4

Are there differences between the way male and female entrepreneurs make decisions about opportunities?

CHAPTER 4: RESEARCH METHODOLOGY AND METHOD

4.1 Research Design

The aim of the current research study was to understand the role of heuristics in the way successful entrepreneurs make decisions. The study sought to make use of a qualitative design to explore the existence of heuristics along with their impact on the decision-making process.

4.1.1 Grounded Theory

The current study has been substantially influenced by Grounded Theory. Grounded Theory was defined by Corbin and Strauss (2008) as “a specific methodology developed ... for the purpose of building theory from data” (p. 1). Locke (2001) described the defining features of Grounded Theory as a “commitment to research and ‘discovery’ through direct contact with the social world studied coupled with a rejection of *a priori* theorizing” (p. 34). The researcher believed that this methodology was appropriate to the current study because while other studies had been done that analysed single heuristics and opportunity identification/evaluation (Bryant, 2007; Holland, Reutzler, Chandler, & White, 2009), few, if any, studies had attempted to establish what the most prevalent heuristics were and how they were used when entrepreneurs were in the process of making decisions about opportunities.

4.1.2 Design

From a review of the existing literature, the researcher was not able to find any studies that explored the role of heuristics in all three identified areas of entrepreneurial opportunity: identification, evaluation and exploitation. Therefore, attempting to make use of a deductive research design would be inappropriate.

Inductive research designs are used to develop theories from an analysis of data already collected (Saunders & Lewis, 2012). Exploratory studies are used to establish new insights and assess topics in novel ways and should be used to discover general information about a topic when the researcher does not thoroughly understand it (Saunders & Lewis, 2012). As such, an inductive, qualitative study that aims to explore the existence of heuristics in the decision-making process was most appropriate.

4.2 Scope

The scope of this research was limited to South African entrepreneurs that have had experience with successful businesses. Using the entrepreneurship literature reviewed in Chapter 2 as a foundation, the researcher defined successful entrepreneurs as having businesses at least three years old that are trading profitably and employ a minimum of three people. This delineation ensured that the sample consisted of more established businesses and not 'one-man-shows' or 'fly-by-nights'.

The reason for limiting the scope of this research to South Africa was a practical decision as the researcher was based in South Africa and attempting to gain access to international entrepreneurs would be beyond the scope of the research requirements. The purpose for defining successful entrepreneurs according to the definition above was to make sure the researcher did not include 'one-man-shows' and other small and struggling businesses. In order to ensure that sample members fit the above description, a few simple demographic questions were asked about the business.

4.3 Universe / Population

The relevant population for this research study included all successful entrepreneurs (as described above). The size of this population is unknown as there is no complete list of all entrepreneurs fitting the description. In order for a population to be useful to the current study it must fulfil the following criteria:

- i) Population members must be entrepreneurs;
- ii) Population members must be currently running a business;
- iii) Population members' businesses must be at least three years old; and
- iv) Population members' businesses must employ at least three staff members.

Two potential populations were initially identified that fulfil the above criteria, namely:

- Endeavor, and
- Entrepreneurs' Organisation

During the interview phase of the research two additional populations were identified:

- Spinnaker Growth Partners
- Goldman Sachs-GIBS 10,000 Women Certificate Programme

These four organisations were used to establish contact with initial entrepreneurs.

4.4 Unit of Analysis

The unit of analysis for this study was entrepreneurs (individuals), as the aim of the study was to better understand heuristics used in decision-making. Individuals, not businesses, make decisions.

4.5 Sampling

4.5.1 Sampling technique

As there is no complete list of all entrepreneurs that fit the criteria for this study, a non-probability sampling technique was used. Saunders and Lewis (2012) defined non-probability sampling as “a variety of sampling techniques for selecting a sample when you do not have a complete list of the population.” (p. 134).

The researcher felt that a combination of purposive sampling and snowball sampling was the most appropriate method for the current study. Purposive sampling is the most commonly used non-probability sampling technique and allowed the researcher to exercise his judgment when choosing sample members that he believed were best suited to answering the research questions (Saunders & Lewis, 2012). Initial sample members from the chosen universes were identified using purposive sampling.

Snowball sampling facilitates a process whereby existing sample members identified further potential sample members. The researcher felt the inclusion of this sampling method was warranted, as the original sample members were most likely to identify other entrepreneurs who were similar to themselves. While this specific fact may be a negative factor for most samples, where diversity would be considered to be beneficial, in the current study, having successful entrepreneurs identify additional successful entrepreneurs proved to be very effective.

4.5.2 Sample size

The exact sample size needed for qualitative research depends on the design of the study. Essentially, the researcher continued to collect data until saturation occurred (Francis et al., 2010). The researcher was able to achieve a sample of twelve entrepreneurs who conformed to the requirements outlined above.

As per the Grounded Theory methodology, analysis was conducted alongside data collection to facilitate the process of reaching data saturation. Saturation occurred while analysing interview eleven, but the researcher decided to conduct interview twelve to serve as confirmation of saturation.

4.6 Data Collection

4.6.1 Design

Data was gathered through the process of in-depth, semi-structured interviews. Semi-structured interviews allowed the researcher the flexibility to delve into issues of interest while remaining on-track with the overarching themes of the research (Saunders & Lewis, 2012). Interviews were recorded and transcribed. and then loaded into Altas.ti for qualitative analysis.

4.6.2 Reliability and validity

According to Saunders and Lewis (2012) research is considered to be reliable if it produces consistent findings, given the data collection methods and analysis procedures employed. Four principle factors are identified that could threaten the reliability of research findings: (1) subject error, (2) subject bias, (3) observer error and (4) observer bias (Saunders & Lewis, 2012).

Table 3: Control Factors to Ensure Reliability of Study

Factor	Control
Subject Error	Subject error should not be a problem due to time not being a significant variable in how sample members were selected.
Subject Bias	Data was collected by means of semi-structured interviews. Validation questions were used to help ensure subjects provide honest data.
Observer Error	Observer error should also not prove to be a problem in the study as only one interviewer (the researcher) conducted all interviews.
Observer Bias	An independent third party was consulted to get feedback on the interpretation of the data collected. This person was a faculty member of GIBS.

A set of questions was included in the interview schedule as a means to test the level of honesty provided by the entrepreneurs. As the entrepreneurs interviewed were considered successful, when they were specifically asked about the bad decisions they had made in their careers, it sparked a contradictory thought process. This enabled the researcher to search for subtle cues in the way the entrepreneurs responded including their body language and tone of voice. Only one out of all twelve entrepreneurs interviewed was not able to comfortably discuss bad decisions they had made. Many of the other entrepreneurs provided similar responses to the set of questions, which further supported the reliability of their responses to the interview questions.

4.6.3 Pre-testing

Hofstee (2006) suggested that testing questionnaires and other research instruments could help ensure their reliability. The researcher identified two subjects that fit the description of the desired sample members who were used to test the semi-structured interview. A mini-analysis of the data collected was done to ensure the interview questions addressed the needs of the research. Insights gained from the pre-test process were incorporated into the main study and the interview schedule was adjusted accordingly.

4.7 Data Analysis

Data analysis was conducted in conjunction with the data collection process, unlike conventional research methods whereby data is first collected and then analysed in its entirety. This process of analysis is consistent with the Grounded Theory methodology (Corbin & Strauss, 2008). All twelve interviews were recorded and transcribed. The transcribed interviews were analysed using qualitative data analysis software, Atlas Ti.

4.7.1 Data coding process

A three stage coding process was utilised to develop the new Grounded Theory. Corbin and Strauss explained the process as consisting of open, axial and selective coding (2008), while Birks and Mills used the terms initial, intermediate and advanced coding (2011).

Phase 1: Open Coding

Open coding was performed on two interviews (data sets) by analysing the data and assigning codes inductively. The researcher had no preconceived ideas regarding the assignment of codes to each datum. Corbin and Strauss explained the process of open coding as “breaking data apart and delineating concepts to stand for blocks of raw data” (2008, p195).

Phase 2: Axial coding

An analysis of the initial codes revealed twelve higher-level code “families”. Each initial code was assigned to a code family to narrow the focus of the study and to quantify occurrences of observations.

Phase 3: Theoretical coding

The final stage of the coding process entailed a continuous reviewing of the emergent themes with a view to interweave them into a new Grounded Theory. Relationships were identified and validated and an iterative process of refining the core categories—in light of the relationships—was performed.

4.7.2 Thematic analysis

Thematic analysis is a form of content analysis, which pays more attention to the qualitative aspects of the data being analysed (Joffe & Yardley, 2003). Thematic analysis is a “method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). The process to conduct thematic analysis as outlined by Braun and Clarke (2006) is as follows:

Table 4: Phases of thematic analysis

Phase	Description of the process
1. Familiarising yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.
5. Defining and naming themes	On-going analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back from the analysis to the research question and literature, producing a scholarly report of the analysis.

Source: Braun and Clark (2006)

The researcher believed this method of analysis was best suited to the current study because of the suitability of thematic analysis to the Grounded Theory methodology. This view is congruent with Suddaby's (2006) discussion of the Grounded Theory process, specifically stating "concepts actually emerged from the study itself (along with consultations with relevant literature that were guided by the emerging thematic analysis)" (p. 637).

4.8 Research Limitations

Qualitative research is highly susceptible to researcher bias. Grounded Theory is even more susceptible because by its very nature, the methodology requires that new theory is developed from observing collected data. There are many stages in the research process where researcher bias can influence the study: sample determination (both size and members), data collection, data coding and interpretation of findings. The specific language used when determining codes is also open to hidden assumptions and preconceived biases (Charmaz, 2006).

The current study only analysed South African entrepreneurs and therefore the findings cannot be generalised across other business- and non-business leaders in other countries. The decisions entrepreneurs make are influenced by the context they are in. Access to information, the legal and regulatory environment and 'status' associated with being an entrepreneur affect the way in which they make decisions. All of these concepts were not considered in the current study and hence are suggestions for further research.

CHAPTER 5: RESULTS

5.1 Introduction

The previous chapter comprehensively explained the methodology used to conduct the study on the heuristics entrepreneurs use when making decisions about business opportunities for the purpose of building a new Grounded Theory. The following chapter presents the results obtained from the interviews conducted with successful entrepreneurs.

Twelve interviews were conducted with entrepreneurs from a wide range of industries and backgrounds. The interview schedule that guided the semi-structured interviews is included in Appendix A.

A table describing the profile of interview respondents is presented below.

Table 5: Profile of Interview respondents

Interview	Industry	Gender	Race	Years in operation	Employees
1	Online Marketing	Male	White	4	8
2	Training	Male	White	12	18
3	Resources	Male	Black	4,5	8
4	Telecoms	Male	White	7	35
5	Information Technology	Male	White	10	25
6	Health Care	Male	White	7	4
7	Mining Manufacturing	Male	White	9	25 – 60
8	Email Marketing	Male	White	8	64
9	Interior Design	Female	White	4	4
10	Mining Maintenance	Female	Black	3	25
11	Business Commodities	Female	White	4,5	4
12	Interior Design	Female	White	10	15 – 65

5.2 Problems Identified with the Interview Process

As the researcher was inexperienced with conducting qualitative research and had very limited experience conducting interviews, there was a definite learning curve. As such, the quality of the process improved with each interview. Due to the nature of Grounded Theory being a predominantly inductive research methodology, the researcher tried to not lead interviewees toward predetermined specifics when responding to questions. On analysis of the data recorded it is evident that one specific question did result in interviewer led responses (question 1.3). This fact has been considered in light of the ultimate research objectives and the researcher decided that the problem was not significant and did not require the data to be cleaned.

A change in settings on the dictaphone resulted in a low quality recording on the 5th interview which required a process of data cleaning. The quality issue was only realised a few days after the interview so when the interviewer went back to attempt to fix it, it was not fresh in his mind. The transcription was clearly marked where sections of the recording were inaudible.

5.3 Phase 1 – Open Coding

5.3.1 Methods employed

All raw data was recorded and transcribed as preparation for analysis. Consistent with Grounded Theory methodology, data was analysed continuously as it was being collected. Within a few days of the completion of interview 1 and interview 2, these were analysed and coded by making use of line-by-line coding (Charmaz, 2006). No filters were applied to the coding process to ensure a purely inductive coding process was achieved and to eliminate researcher bias as much as possible.

5.3.2 Results

The process of line-by-line open coding resulted in 302 unique codes. A complete list of all initial codes is included in Appendix B. At this stage of the analysis process no densification was applied and hence no categories or themes emerged.

5.4 Phase 2 – Axial Coding

5.4.1 Methods employed

From an analysis of the initial codes discovered in phase 1 and a process of densification, several constructs were identified that encapsulated all 302 of the initial codes. An iterative process followed that involved comparing the data to the emergent theoretical constructs as well as comparing the constructs to one another.

The remaining interviews were coded using the identified constructs deductively. The researcher attempted to remain open to the possibility of other constructs emerging from the data to avoid a prejudice in the results. Five additional theoretical constructs were identified during the analysis of later interviews and the researcher went back over the data to code for these additional themes.

5.4.2 Results

This analytical process is deemed to be complete when saturation occurs. Saturation is considered to have occurred when no new major constructs or themes appear to be developing. The final result was a list of twelve major themes that emerged before saturation occurred.

Emergent Themes:

- Categories of Decisions
- Commitment
- Formal Processes
- Emotional Processes
- Influence
- Inputs Required
- Outcomes Desired
- Environmental Factors
- Control
- Risks
- Balance
- Reasons for not pursuing opportunities

The following section includes a discussion of each of the major themes identified along with evidence from the data collected. Pseudonyms have been used when quoting examples from the data to ensure that anonymity is maintained.

5.4.3 Categories of decisions

Entrepreneurs classify the type of decision to be made according to a few different categories. In some instances the entrepreneurs from the study distinguished between financial, operational, marketing and human resources decisions. In other cases decisions were categorised as being either small (day-to-day) decisions or larger (strategic) decisions.

- **Sean:** *“It depends on the decision. If the decision’s financial, versus if it’s staffing or if it’s personal.”*
- **Ross:** *“I don’t think of them as business decisions, they’re more like project decisions.”*
- **Leonard:** *“On an on-going basis you make maybe some bigger decisions, some smaller decisions.”*
- **Kent:** *“If it’s a strategic decision, it’s more of a gut feel actually.”*
- **Ross:** *“in a way everything in a small business is a financial decision.”*
- **Michelle:** *“marketing I find always difficult and then financial and then production, production is very easy. You know I feel, you know I have done it often enough and I always consult with the women, you know it is always a combined decision ... marketing and financing I find more difficult.”*
- **Thabi:** *“Ja, I do have day to day decisions where things just come in and randomly you can just make a decision immediately but there are those, like you say, strategic decisions when now you say, if I make the decision, how is it going to impact me.”*
- **Simon:** *“So, it all depends on what part of the business it is though, so, our finance team, their decisions are based very purely on how the finances are going. My sales team are very driven by targets, and if they’re doing well on their targets, they have to make less decisions, if they’re doing badly, they have to make more decisions, and the data is feeding that. Whereas the products are more emotive, they’re doing research and they’re designing*

things based on how they feel. So, I would say it's emotive and factual based."

5.4.4 Commitment

The commitment theme came across in the data as being related to extended periods of time and entrepreneurs' willingness and ability to *stay the course* and remain committed to their goals. A sub theme within the commitment theme relates to an entrepreneur's need and ability to focus their efforts.

- **Robert:** *"I always thought I'll start this business and I'll make a lot of money and then I'll do whatever but it doesn't work like that. It could easily be 10 years, it could be 15, it could be 20 years you know, that could be your life but you've got to think very carefully about what it is you're getting involved in."*
- **Robert:** *"I think you've got to decide this is what I want to do, this is where the market's going, this is where I believe I can make a lot of money or I can grow a real business and then it spirals after that because it takes a lot of time and a lot of effort to take, it takes years."*
- **Trevor:** *"if we create wealth we will make decisions...long term decisions."*
- **Gail:** *"You know, I don't want to do anything that's just, I'm kind of flying through. It's got to be done properly."*
- **Stuart:** *"Now I'm not trying to build something that's clever and people say oh you know look at those guys they're doing clever things, smart things, no we actually want to be a massive corporate one day, employing tens of thousands of people. So that's the aim."*
- **Thabi:** *"I'd like to see profits and sustainability, if there is, if it's not a short term."*

5.4.5 Formal processes

Formal processes included any documented procedures entrepreneurs use to make decisions along with any mathematical formulas. References to spreadsheet calculations, decision-making matrices, IRR, NPV along with discussions among senior people in their respective businesses all constitute formal processes.

- **Leonard:** *“As I say, for example you can make a decision, should we finance this or should we like buy it up front, that type of decision and it’s a very financial decision. You can do the calculation, bring in a weighted average cost of capital and blah blah etc. and it comes out, no, we should definitely buy it and we buy it and it’s an easy decision because it’s a financial thing which pops out of a spreadsheet.”*
- **Melissa:** *“I’ve got a kind of a matrix where we will put all of our, all of the necessary areas that we have to put in there and based on the outcome of that, we will decide then if we’re going to go for certain business or not.”*
- **Gail:** *“I want to know real, real things, you know. So it would be very, very, like it would be, like a very technical, like due diligence, it wouldn’t be like, oh, I love you, let’s do business.”*
- **Michelle:** *“What we do is we get, we always get quotes from at least three different suppliers.”*

While most entrepreneurs commented on the benefits of having formal processes in place to make decisions there was an instance where formal processes were denounced in favour of emotional processes.

- **Kent:** *“So in terms of decision, one could argue one should do the whole due diligence process, check and...the products by the way is software for the primary health care market. So how do you go about finding the right people, making sure that nothing happens...or do you trust your instinct and just minimise the risk of something going wrong?”*

5.4.6 Emotional processes

Emotional processes are unstructured, informal processes entrepreneurs access when making decisions. The emotional process theme was evident in the use of instinct or “gut feeling” and the fact that entrepreneurs need to enjoy what they do to be successful. This element of fun, excitement and doing something that’s challenging, different and inspiring comes across in many of the larger decisions the entrepreneurs interviewed in the study made. A strong example of using an emotional process to make a decision came across with the mention of the entrepreneurs’ passions.

- **Ross:** *“I’ve tried to get my wife into a business; an idea that I had and I thought well she could run this perfectly. She’s a very capable person, very smart, all those types of things, but it was my thing not her’s, and I saw also there that you’ve got to have some real heart for what it is that you’re doing and if you don’t, it’s just like a job and then you can know, then you want to fill the job role but you can’t get them to fill the entrepreneurial role because it requires that driving behaviour all the time.”*
- **Sean:** *“I started trusting my gut massively, it’s a lot of things are gut decisions and I feel that that is, it obviously cannot be ruled by the heart especially in moments of temper, but at the same time if something feels right, it most probably is right and it’s really what I believe and if you open yourself up to the right types of experiences and your mind’s in the right space – the decisions you make should be the right decisions.”*
- **Leonard:** *“I think as a small entrepreneur, I think it’s important to make decisions very quickly, trust yourself, trust your gut, don’t be too cowboyish, but, you know, make the decision and live by it.”*
- **Leonard:** *“So get all the relevant information, but then the actual decision is like, it sounds a bit clichéd, but it’s a gut feel. I’ve got all the information of the two things and I feel that A is the right decision because just that’s what my gut tells me.”*

- **Simon:** *“I have a deep passion just for energy problems, personally. So I would like to do something in that.”*
- **Thabi:** *“I think that one is just driven by the passion to love food, love cooking and I enjoy, that’s my pastime, so it’s not something that I would really, but I would love to because it’s something that I like, yes, really, that’s my choice, food.”*

5.4.7 Influence

The influence theme encapsulates all the possible external influences that affect the way in which entrepreneurs make decisions. The most evident form of influence came through in the form of human relationships and to a lesser degree corporate relationships (including the effect of competition).

- **Simon:** *“some nut from America flew up and he sat with us in a room for an hour, and he said to us, look, you guys are really clever bright young guys, but you’re just opportunists, you’re not doing anything meaningful, you’re doing everything average, you’re just chasing the cash. And it was something that we knew, but it was really good to get an outsider’s perspective on that.”*
- **Thabi:** *“Relationship is the most important thing for me.”*
- **Melissa:** *“I’m realizing it more and more and more is that people ultimately do business with people they like.”*

Influence was also evident in the form of other companies and other brands influencing the entrepreneurs.

- **Trevor:** *“if you’re already in a business, you want to see how you can leverage from your current one, you know, because that’s your brand, its greatly locked into other brands but you also want enhance your current brand. If it’s not a new business, it’s a different story because you don’t have a brand. You have to look for other brands to piggy-back on or to support.”*

- **Kent:** *“You know Incredible Connection, the computer shop? That’s actually where I got my idea from.”*

The influence theme was predominantly evident in a positive context. However there were cases where entrepreneurs were influenced to make decisions that they later felt were not in their best interests and cases where the entrepreneur expressed feelings of distrust in the relationship and therefore decided not to pursue a particular opportunity.

- **Melissa:** *“I was sitting in the bank and my manager...said, you know, there’s, this package is going to be good for you and I just decided to buy this package. I was very angry afterwards because it was the worst thing that I could have done.”*

An interesting contradiction occurred within a single interview regarding the importance of people and their influence on an entrepreneur’s decisions:

- **Sean:** *“I fear making a decision based on what people tell me to take.”*
- **Sean:** *“I will often make a decision based on the people I’m interacting with.”*

5.4.8 Inputs required

One of the two most evident themes uncovered in the data relates to the inputs that are required to achieve a specific objective. In many instances entrepreneurs made decisions in consideration of the resources they had available to them or the resources they were able to access quickly. Resources include human capital, specific skills and knowledge, funding and other forms of financial resources, time and unique gifts and talents coupled with the desire to utilise them fully.

- **Stuart:** *“I don’t think you should ever, ever, ever make a decision based on whether we’ve got sufficient x, y and z to get it done.”*
- **Kent:** *“we tend to try and look at almost every business idea in practical terms. So not judging whether it’s good or bad, but judging with what we have, we can do something about it tomorrow morning.”*

- **Trevor:** *“When I make any decisions of a new product, I always make sure that my current business is in a position where I’m liquid enough to take advantage of such opportunities.”*

Cash as a resource within the business was seen as an enabler of decision-making.

- **Thabi:** *“If I maintain enough cash in the business, I can make a good decision if the opportunity arises.”*

Time as a resource was found to be a very limiting factor when it comes to exploiting new opportunities.

- **Michelle:** *“There is a company in India who is interested, but I have not pursued it...I just have not had the time to do that.”*

The resources that are available to entrepreneurs are not considered to be of equal value. Time is considered to be of less value or similarly is considered to be less scarce and therefore more likely to be invested than money.

- **Sean:** *“if I put in a lot of money I will not abandon an idea so quickly as I’ve just put in time and I know I guess you can create time to money but I just for some reason my mind is hard wired to do if it’s financial and I’ve actually physically taken capital and invested it and it’s going to fail that’s more of a concern for me than taking my time and effort and then I’m shutting an idea down, I don’t feel I’ve lost as much at all.”*

Interviewer: *“Which would you, be more willing to invest?”*

Sean: *“My current expertise and skill would be first, my time and following my time – money, especially if it’s an idea that I’m not an expert in. If it’s something I understand fairly well, I’d be more interested in giving him money because I am quite, I still see myself as risk of this.”*

5.4.9 Outcome desired

The desired outcome theme is the second most prominent theme and included all decisions that were made and the thinking processes behind those decisions where a specific outcome was the primary driving force.

- **Robert:** *“we will sell. So we don’t, I don’t want to build this business into a global business. I want build it with as much as I need to build it in order to sell it for the right price.”*
- **Kent:** *“We want to look good, we buy the latest devices because they’re cool, we drive a car for safety, we want to grow your company because you want to make more money, to have more stability in your life.”*

One of the most interesting elements that was evident within this theme was an action-oriented focus, specifically as it relates to the short term.

- **Kent:** *“Very, very practically orientated. We try to keep our organisation less glass office strategic and more practical...but our short term aim is what do we do tomorrow morning?”*
- **Simon:** *“I think things are only as good as the implementation, even a bad idea implemented is better than a good idea not done ... Take it to customers, let’s try and sell it, let’s see if it’s actually going to work. Just cool it on the five thousand things you want to do, let’s do something....I’m very sort of action orientated and delivery orientated, opposed to just strategising our whole lives away, so, but I get things done.”*
- **Sean:** *“I think some of the ideas were very, very not enough research seemed very, very clever until practically thought out, you know the invention ideas we’re trying to create that tangible item. Very nice and theory until you start working out the pragmatic areas of production and stuff.”*
- **Ross:** *“I think so much of my experience around new business is that it’s all just about taking the next step.”*
- **Sean:** *“You can have the best idea in the world, but if you don’t actually do anything with it, it wasn’t a good at all. Ideas are nothing. Ideas are a dime a*

dozen. Lots of people have ideas, very few people ever actually take action on them.”

5.4.10 Environmental factors

The environmental factors theme takes into account specific influences on entrepreneurs that do not fit within the inputs required and desired outcome themes but more specifically relate to the context in which a decision is being made.

The most common environmental factor that was considered by the entrepreneurs who were interviewed related to the size of the market into which they could sell their product. The next most common element of the environment the entrepreneurs are operating in related to their competition.

- **Simon:** *“The first and most important thing is market size.”*
- **Michelle:** *“It is very difficult especially because we have a very niche market.”*
- **Leonard:** *“So the idea came, just identifying an opportunity in a space where there was an existing industry but there was a lot of inefficiencies and it could be done a lot better.”*
- **Robert:** *“Time zone plays a big part for us and I say time zone but the time zones that we have chosen are up in China and the States or South America are all outside of our time zone but if we had to choose another one, time zone would be because we would want to run it from here.”*
- **Robert:** *“The cost of entering the market, the size of the market and the competition ... those were the main three things that we looked at. So that’s how we’ll consider any other market.”*

Most entrepreneurs who discussed competition were very interested in who their competition was and how they were behaving. One contrary view held that competition is not necessarily a very important consideration.

- **Kent:** *“Not too worried about competition generally, because I think the market is big enough and the people don’t know, don’t have perfect information anyway.”*

5.4.11 Control

The control theme encapsulated the entrepreneurs’ desires to remain in control of a specific situation. Also included in the control theme were any mentions of systems or procedures that are in place to control the operations of the entrepreneurs’ businesses.

- **Trevor:** *“For us the challenge lies in to say well, if we...how far can we backward integrate and how efficient we can be with every transfer point in that backward integration process? And that’s the value. And people don’t recognise that value.”*
- **Melissa:** *“They don’t have autonomy, they’ve got to discuss it with me and they’ve got to obviously tell me why they think they need to do it.”*
- **Melissa:** *“I hate having to know that somebody else holds my future in their hands and ja, so that was ultimately the deciding factor, so when the opportunity came about I thought, OK, now is the time, let me move on.”*
- **Michelle:** *“Well in the discussion there would either be consensus or not but ultimately I will make the final decision.”*
- **Stuart:** *“I get to defer to the board and the board will ask those very difficult questions... So that’s the comfort that I have, which I understand most entrepreneurs don’t because they need to make the call. But we, there’s a reason we’ve got the governance structures that we do.”*

Another area of control that was displayed during the interviews is the concept of leverage. Entrepreneurs talked about using their existing assets to create opportunities through leverage.

- **Trevor:** *“There was a strong possibility that it wasn’t a [bad] idea that I had at the time, because that could have been the footprint for something else. It’s that infrastructure underlying value that I spoke to you about.”*

5.4.12 Risk

Risk is considered to be almost synonymous with entrepreneurship. When making decisions about opportunities, entrepreneurs would consider the risks involved and in some cases compare the risks to the desired outcomes. It is evident from the data that risk, as a decision-making criterion, is considered as a higher priority to the desired outcome. If the risk is perceived as being too great, despite a highly desired outcome, the outcome of the decision favours the risk element of the argument.

- **Sean:** *“To diversify what I’m doing and not put all my eggs in a similar basket, not the same basket, but I want to diversify to different areas that can generate me income from with different mitigating factors. So I’d like, I’d like to spread my risk.”*
- **Stuart:** *“There’s no way, there’s no guarantees in being an entrepreneur and there’s no way that you can say that this will work and this won’t work.”*
- **Trevor:** *“So your exposure level in terms of bonds, in terms of collecting money, in terms of the people that work for you, the... And you’re selling hours, you’re not selling equipment, or you’re not backward integrating, fabricating [inaudible]. So you’ve got a [huge] load of risk for two hundred million instead of having fifty million to make the same amount of money, much lower risk, you protect your IP better and you protect your value changes”*
- **Simon:** *“There are some things because we start becoming a company of size which we can risks on, but my risks will be budgeted, so, if somebody*

wants to build something with just an idea, I ask them, ok, how much time do you want for it, they tell me a need four months, I'm ok, that's hundred thousand, two hundred thousand rand investments, that's not a lot of money, I can cope with that and I will let them take that risk. But then they've got to prove to me the upside of this, so they'll say I think this many people can buy it, we can sell it for this, and then it's a calculated risk on how we do it."

- **Gail:** *"Being able to bring that sort of, that reasoning in, like measuring a risk and measuring the assumptions."*
- **Thabi:** *"Sometimes it's difficult because you weigh the risks first, but it's not always easy to see how much of a risk is there, so sometimes you take a chance."*

5.4.13 Balance

The concept of balance as it relates to how entrepreneurs make decisions is an interesting theme that only became evident for the first time during the interviews with female entrepreneurs. When the researcher revisited the first eight interviews with male entrepreneurs, balance was only present in half of the interviews.

The balance theme was evident in two distinct forms. Firstly it included all the factors that are considered when making decisions that would enable or promote balance in the entrepreneur's life. Examples of this type of balance included work/life balance and inner-peace and harmony. The second form of the balance theme included factors that required some form of balance within the entrepreneur's business. Examples of this form of balance included trade-offs and allocation of resources.

Work/life balance:

- **Gail:** *"So I have to understand myself and obviously understanding yourself better, your world is more balanced."*

- **Gail:** *“I’m very much about equilibrium.”*
- **Robert:** *“There may be a lifestyle business where you’re making two hundred grand a month is exactly what you want, you know, you only work a few days a week, well great you know, that’s a great life.”*

Factors requiring balance within the business:

- **Kent:** *“So it’s usually based on trade-offs...what it will cost me versus that project and how we can balance the two.”*
- **Kent:** *“But there’s a trade-off. At our stage of growth we don’t have the resources to be completely innovative on the products and services side.”*

5.4.14 Reasons for not pursuing opportunities

The primary objective of the current study is to help enable entrepreneurs to make better decisions regarding opportunities. An interesting and highly relevant theme that emerged from the data included all the reasons the entrepreneurs mentioned for why specific opportunities were not pursued. Interestingly, when talking about opportunities that were not pursued, most of the entrepreneurs mentioned that they would still like to attempt their business ideas in the future.

Other causes of not pursuing opportunities included:

- Not having the right equipment.
- Scope of work being too onerous for entrepreneur's business – required to invest large amounts of money upfront before witnessing any returns.
- Lack of experience and not willing to sacrifice comforts.
- Children being very young, and parent committed to providing a full-time role within the home.
- Lack of focus.
- Survival of current business.
- Ideas are too complicated.
- Too reliant on a dominant player in the market.
- Lack of ambition.
- **Trevor:** *“He’s too scared to lose his money, and he doesn’t want to start from scratch again.”*
- **Sean:** *“99% of them haven’t well... almost all of them haven’t planned out or have been abandoned along the way but the one growing concept that I stick with is the business that I run today but I also see every single one of them as a major learning... uh... an experience and I don’t see any of them*

as failures, I see every single one of them as growth, education, school fees.”

- **Ross:** *“I find there’s never a shortage of the ideas, there’s never a shortage of having conversations about the ideas, but it gets to a point where it’s a practical decision saying is that am I better off investing in this to get this kind of a little bit closer you know to take me closer to freedom or does the new thing do it.”*
- **Ross:** *“I want to weigh it up against, you know, one more deal on this side of the business will be worth two years of sweat in that side so I’ll just back off but I’ll certainly lie awake at night and imagine how great it could be, I just won’t follow through because you know maybe or we’ve come to realize that it’s much easier to sign the deal than to start a new business and that’s real money that hits the business you know maybe, it’s a half a million bucks you know every couple of days that just you know it’s going to take a while before anything can beat that.”*
- **Stuart:** *“I didn’t pursue because all the know-it-alls in the insurance industry will say, no, that’s not how insurance works.”*
- **Kent:** *“Fantastic idea. Great revenue model. You write it once and every time you read a case study, it gives us to pay somebody. That never took off because we never actually rolled up our sleeves or did any work. We just thought it was a great idea.”*
- **Sean:** *“The first thing I do when I think of an idea is think of all the reasons why I can’t do it. If I can come up with enough decent and without lying to myself honestly with enough good answers to think why it would work, I then explore it further but if I can come up with one massive issue, I stop.”*

5.5 Phase 3 – Theoretical Coding

During the open coding process the data was fractured and labelled to ensure comparability and proclivity for clustering of codes. In the second stage of coding, axial coding, the data was clustered with other similar data to create themes. Theoretical coding is the final stage of coding when developing a Grounded Theory and encompasses a weaving together of the various themes to build testable theory.

Once data saturation had occurred and the twelve major themes emerged, contrasts and similarities between themes became evident. Some of the themes emerged as opposites sides of a single construct:

Inputs Required and Outcomes Desired are closely linked and express contrasting view points on the opportunity identification, evaluation and exploitation continuum.

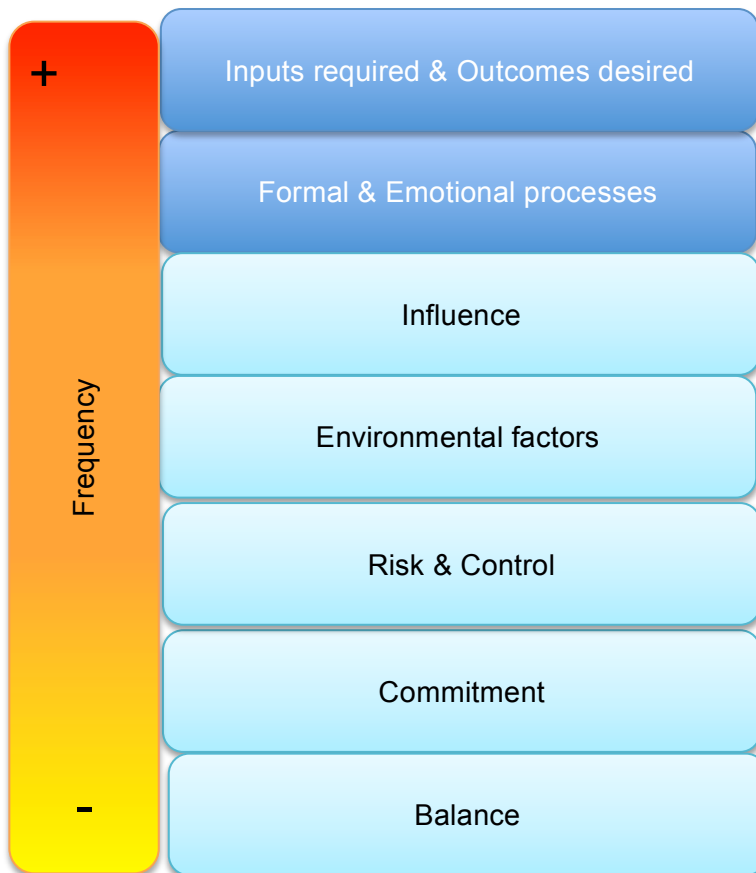
Formal and Emotional processes are contradictory decision-making techniques that are employed either exclusively of each other or in conjunction with each other.

Risk and Control are the last two themes that relate to each other and represent opposing views of a single decision. Risk includes all the threats to an entrepreneur's business while controls include all the measures an entrepreneur might make use of to mitigate the risk.

These three double-sided, connected themes form the basis of the heuristics entrepreneurs use when making decisions about opportunities. The following chapter discusses how they are employed and what effect they have on decision-making.

Figure 3 below demonstrates the seven emergent heuristics and lists them according to the frequency with which the entrepreneurs mentioned them. The most frequent heuristics at the top of the model were evident within the data over 300 times each, while the five remaining heuristics were each mentioned less than 100 times. The ordering of the heuristics below has no connection to their effectiveness

Figure 3: Heuristics employed by entrepreneurs when making decisions about business opportunities



CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

The previous chapter presented the results obtained from the Grounded Theory study to address the research questions posed in Chapter 3 regarding the way heuristics are employed by entrepreneurs when making decisions about business opportunities. The following chapter discusses the results obtained in view of the literature reviewed in Chapter 2.

In truth, it is not possible to directly determine whether or not a specific opportunity will be successful or not. Every time an entrepreneur makes a decision to pursue an opportunity they are taking a risk, despite the fact that they may not perceive the risk (Simon, Houghton, & Aquino, 2000).

The discussion that follows takes the evidence acquired from analysing the responses of twelve entrepreneurs explaining how they make decisions about opportunities and explains the heuristics they employ to make these decisions more quickly. The initial point of departure briefly analyses the way in which the entrepreneurs in the research study made decisions. Successful entrepreneurs often make decisions without being fully conscious of the process they make use of to reach those decisions. Two examples from the data, presented below, show how the entrepreneurs are aware of this fact.

- **Ross:** *“Entrepreneurs make decisions all the time, but they’re like blink decisions, you’ve read Gladwell’s blink? So you either... I can’t tell you why or how I make them, I don’t really think how it happens but they happen all the time.”*
- **Kent:** *“Well I think with the years you learn to make more instinctive decisions. It’s a bit like Malcolm Gladwell, that Ten Thousand Hours book. After quite a few decisions you start instinctively seeing the patterns and seeing things that somebody who just starts out in a business might not be able to see.”*

These responses agreed with Shepherd’s (2011) perspective, where entrepreneurs are influenced by many different factors when making decisions and that “there is likely variance across individuals in their weighting of criteria when making decisions on an entrepreneurial task” (p. 414).

The way entrepreneurs make decisions about the opportunities they face is both relevant and extremely important to their potential success as businesses do not grow in a predetermined linear progression but rather through an iterative process of making decisions and continual mid-course corrections. Data from many of the interviews conducted during this study confirmed this point of view, although there seems to be no consensus within the academic literature (Achtenhagen, Naldi, & Melin, 2010; Leitch, Hill, & Neergaard, 2010; McKelvie & Wiklund, 2010).

The table below is a depiction of the various types of decisions entrepreneurs make. They have been divided into two major categories: large and small. Within the large decisions category there are two sub-categories: decisions that relate to the overall strategy of the business and those that relate to the growth of the business. Smaller decisions include all the day-to-day operational decisions that need to be made to run the business.

Table 6: Categories of Decisions

Large Decisions					Small Decisions			
Strategic			Growth		Operational			
Partnerships	Reaction to Market conditions	Sales strategy	Hiring	New Markets	Technical	Purchasing	Product	Suppliers

6.2 Discussion of Research Question 1

The purpose of Research Question 1 was to understand the way in which entrepreneurs make use of heuristics when making decisions about business opportunities. In order to understand how these heuristics are employed a brief discussion of the heuristics themselves is necessary. Figure 3 outlined the heuristics discovered from the Grounded Theory research process. The order in which the heuristics are presented in Figure 3 was determined by the frequency of observations of each heuristic within the total set of data collected.

The following section analyses each of the heuristics and how entrepreneurs use these to make decisions.

6.2.1 Inputs required / outcomes desired

Entrepreneurs consider the inputs necessary to achieve a certain goal and they consider the desired outcome of making a decision. Section 5.4.8 and 5.4.9 provided many examples of both input and outcome considerations. While the two sides of the heuristic are mostly independent of each other there are situations where both inputs and outcomes are considered together.

This first heuristic has similar characteristics to that of the theory of effectuation (Sarasvathy, 2001). The inputs' available considerations are similar to the concept of effectuation while the desired outcomes' considerations are similar to that of causation.

6.2.2 Formal / emotional process

Decisions are made using either a formal process or an emotional process or a combination of the two. Usually the formal decision-making process precedes the emotional process, and in smaller decisions formal processes take precedence. Larger, more strategic decisions are made using an emotional "gut feeling" process.

Inexperienced entrepreneurs use more formal processes to make decisions but as they become more experienced they make use of “gut feel” emotional processes, which are quicker as evidenced from the interviewee’s response below:

- **Kent:** *“When we first started the business, our decision-making was very slow and painful, and much more, ok one, ok done... And then the next one.... Oh [dear], we don’t know... Let’s ask a couple of people... So it dragged on for ever because we needed to constantly check with people who been there, seen that and done it, whether that product is any good or whether it was just a sales pitch which was brilliant. Over time we become better and better.”*

Interestingly, the development of an individual’s emotional intelligence should enhance their ability to make better decisions (Hess & Bacigalupo, 2011). Emotional experiences that entrepreneurs are faced with in the early stages of their businesses are also significant contributors to the firm’s culture and influence the way the entrepreneurs make decisions throughout the life of the business (Stanley, 2010).

All except one of the entrepreneurs interviewed mentioned examples of both formal and emotional processes. Robert did not mention making use of any emotional processes when making decisions. There was only evidence of formal processes.

6.2.3 Risk / control

The concept of risk is something that entrepreneurs are very well acquainted with (Block, Sandner, & Spiegel, 2013; Fairlie & Holleran, 2012; Hvide & Panos, 2014). Risk encapsulates all the unknown variables in a situation. As it is impossible to understand all the possible outcomes of a decision, entrepreneurs decide on a level of risk that they are comfortable with and make decisions that attempt to remain within that predetermined level.

Examples of the kinds of risks entrepreneurs were aware of included the risk of failure, financial default and not being diversified in their income producing assets. Evidence to support these examples was provided in section 5.4.12.

Once the level of risk has been ascertained, entrepreneurs make additional decisions that work towards controlling the various risks that were assumed/accepted. Entrepreneurs also exhibit an “illusion of control” that diminishes their perception of certain risks when starting new ventures (Simon et al., 2000, p. 125). The current study did not test whether entrepreneurs were actually in control and whether they take measures to mitigate their risk or if they are merely under the illusion of control as the distinction in this case is not relevant.

6.2.4 Influence

From the data collected there was evidence of two major influential factors that affect the way entrepreneurs make decisions about opportunities. The first form of influence includes human relationships. The examples presented in section 5.4.7 emphasise that business is done with people and the impact of a relationship with a specific person affects any decisions that involve that external party. As expected, when an entrepreneur values the other person they are interacting with, the influence the other person has on the entrepreneur’s decisions is much greater. This path leads toward the concept of trust and how it impacts business decisions. Welter (2012) suggested that trust “is critical for entrepreneurship and has the potential to...reduce some risks inherent within entrepreneurial activities and act as a governing mechanism for various entrepreneurial relationships” (p. 205).

The second form of external influence includes the effect that other companies and brands have on the entrepreneur and their business. An interesting observation from section 5.4.7 was how a company in the health care industry modelled their business on a very well-known company in the computer retail industry.

The researcher was not able to find relevant literature on the kinds of influences and the effect they have on entrepreneurs' decision-making processes. The literature that was found offers insight into external influences such as environmental factors and innovation culture within a business and how these factors affect an individual's decision to become an entrepreneur (Lee, Wong, Foo, & Leung, 2011; Sebora & Theerapatvong, 2010).

6.2.5 Environmental factors

Businesses do not operate in isolation. There are many environmental factors that influence the decisions entrepreneurs make regarding opportunities including time zone, regulation and taxation and general economic conditions. The most common environmental factor that the entrepreneurs in the study considered in relation to a given business opportunity was the size of the market for that specific opportunity. Section 5.4.10 exhibited a few examples from the data. The extent to which environmental factors influence entrepreneurial behaviour is significant. Institutional elements within society (legal systems, financial systems, etc.) impact the way entrepreneurs make decisions (Edelman & Yli-Renko, 2010; Lim, Morse, Mitchell, & Seawright, 2010).

6.2.6 Commitment

The commitment heuristic is very closely linked to the entrepreneur's personal goals. The level of commitment that an entrepreneur exhibits depends greatly on their long-term vision for themselves. Erikson (2002) defined entrepreneurial commitment as "the emotional, intellectual, and physical energy that is employed in order to reach the ventures' main objective" (p. 282). Entrepreneurs who want to build a large, high growth business tend to make decisions that increase their level of commitment to the business.

The second element of commitment is the degree of focus exhibited by the entrepreneur. The focus element is influenced by the life stage of the business. Section 6.6.3 discusses the life-cycle of successful entrepreneurial businesses

and introduces the concept of focus as the third stage in the business life-cycle. Focus is a crucial skill that enables entrepreneurs to accelerate their progress towards being successful.

6.2.7 Balance

The balance heuristic was the least common of the heuristics discovered during the study. Balance entails considering two or more options and determining their importance. Balance is more common among female entrepreneurs than male entrepreneurs (DeMartino & Barbato, 2003). Female entrepreneurs make use of the balance heuristic to ensure they are not focusing too much on their business and neglecting other areas of their lives. This finding agrees with Rehman and Roomi's (2012) finding that one of the most significant motivational drivers for women who started their own businesses was to achieve work-life balance. Male entrepreneurs, on the other hand, were concerned with balancing the systems within their businesses to ensure they perform at optimal levels.

6.2.8 Conclusion to research question 1

When entrepreneurs are making decisions about opportunities either within their existing businesses or external to their current businesses they make use of many of the seven heuristics identified above. There is no preference for specific heuristics for identifying, evaluating or exploiting business opportunities and all seven heuristics are used within all three activities. Interestingly, the set of heuristics identified in the study have very little in common with Tversky and Kahneman's representativeness, availability and anchoring heuristics (1974).

6.3 Discussion of Research Question 2

Research Question 2 aimed to identify the ways in which heuristics influence decisions and how they are used to assist in the decision-making process. This section begins by discussing the specific benefits that are derived from the heuristics identified in section 6.2. Following on, a discussion and relevant evidence from the data linking the benefits to each of the heuristics is presented.

From an analysis of the data collected there are three ways in which heuristics influence decisions and assist in the decision-making process:

- Increasing efficiency
- Raising confidence
- Reacting to given circumstances or creating a new reality

6.3.1 Efficiency

Being efficient is to achieve the highest possible productivity with the least possible inputs or resources. There were two constituent elements of efficiency within the data collected during the study, the speed of completing a task and the ability to use prior experience to guide the completion of the task at hand.

6.3.1.1 *Speed*

Heuristics enable entrepreneurs to make decisions faster. This is congruent with Payne, Bettman and Johnson's findings (Maxwell et al., 2011). As entrepreneurs have to constantly make decisions within their businesses and heuristics enable them to make these decisions faster, this leads to increased levels of efficiency.

6.3.1.2 *Repetitive tasks and transferring of past experiences*

The second manner in which entrepreneurs use heuristics when making decisions is to allow their previous experience in a certain activity guide them in their current activity. This could be for a repetitive task or in a case where a related past experience can be used as a reference to the current activity. This process is similar to the anchoring heuristic described by Tversky and Kahneman (1974).

Both of the above mentioned benefits increase the level of efficiency for entrepreneurs. An important implication of these findings relates to a critical point identified in section 5.4.9. Successful entrepreneurs focus on getting things done more than they are concerned with stringent business plans and theoretical strategies. This action-orientation paradigm results in a very practical work load for entrepreneurs. Efficiently managing and completing the practical steps involved in running an entrepreneurial business enables the entrepreneurs to not only get more done but to get more of the “correct things” done to build their business while avoiding time wasting activities that do not contribute directly to the survival and/or growth of the business. A similar theoretical construct in existing management literature refers to the concept of ambidexterity: “the ability to do two seemingly paradoxical things simultaneously” (Volery, Müller, & von Siemens, 2013, p. 2) with the outcome being an increased level of efficiency.

6.3.2 Confidence

Entrepreneurs, by their very nature, are success-orientated individuals. It is unlikely that an entrepreneur would start a business with the intention of it failing. Confidence, along with a need for achievement and personal attitude have a positive effect on an individual's entrepreneurial intention (Ferreira, Raposo, Rodrigues, Dinis, & do Paço, 2012). When analysing the reasons about why highly confident entrepreneurs are more successful with subsequent ventures, Hayward, Forster, Sarasvathy and Fredrickson (2010) concluded that

Confident entrepreneurs undertake more challenging and risky tasks with greater conviction. Survivors set up new businesses, achieve technology breakthroughs, develop new drugs, initiate and articulate novel ideas and theories and so on. Conversely, entrepreneurs who are preoccupied with establishing when and how they could be wrong are more timid, indecisive and defensive; they prefer to avoid mistakes, scrutinize others and resist opportunities (p. 576).

It therefore follows that anything that is likely to increase an entrepreneur's confidence is likely to increase their propensity for entrepreneurial behaviour, which is consistent with the findings of Townsend et al. (2010)

Another interesting perspective on the concept of confidence as it relates to entrepreneurs is Dimov's (2010) construct of opportunity confidence. Opportunity confidence refers to the entrepreneur's "evolving judgement about the opportunity" as they "continually evaluate the merits of the opportunities they pursue" (Dimov, 2010, p. 1123). The more confident the entrepreneur is that the opportunity they are evaluating will succeed and become a profitable business, the more likely they are to apply themselves and put in the effort required to translate the opportunity into a business.

6.3.3 Reacting to given circumstances and creating new realities

When entrepreneurs are faced with situations and circumstances they need to act in a way that serves their business interests best. An example would be a response to a competitor's marketing strategy or new product. This is a predominantly reactionary position. On the other side of the continuum there are situations where an entrepreneur makes decisions based on a desire to create a new reality. This is similar to the concept of entrepreneurial bricolage (Baker & Nelson, 2005) and effectuation (Sarasvathy, 2001). These situations are not in response to an external stimulus but rather born from within the entrepreneur. An example of this behaviour is Apple and their products that were designed to change the way people used computers. Both of these behaviours are evident within entrepreneurs. The purpose of this point of departure is not to compare them or to measure their effectiveness but merely to provide a definition as a benefit entrepreneurs derive from using specific heuristics.

6.3.4 Linking the benefits to the heuristics

The previous section discussed the benefits entrepreneurs derive from making use of the heuristics identified in section 6.2. The following section relates the specific benefits to the each of the heuristics and provides evidence to support these assertions.

6.3.4.1 Inputs required and outcomes desired

The inputs required and outcomes desired heuristic relates to the reactions to given circumstance and creation of new realities benefit. When entrepreneurs make decisions based on the inputs they have available, they are reacting to a given set of circumstances. Whereas when entrepreneurs have a vision for something they want to achieve and work towards a desired outcome, they are creating a new reality.

In section 5.4.8 Thabi explained that she would be able to react to a opportunity if she maintains enough cash in her business. In section 5.4.9 Kent discussed the reality “we” are trying to create as having fancy things and stability in “our” lives.

6.3.4.2 Formal and emotional processes

Both formal and emotional processes provide entrepreneurs with the benefit of efficiency. Formal processes include systems and procedures that assist entrepreneurs with making decisions. These systems and procedures are likely developed over time through a process of learning and adapting or adopted from another external source. In section 5.4.5 both Melissa and Michelle provided examples of systems that reduce the amount of time and effort necessary to make a decision. Emotional processes also allow the entrepreneurs to operate with increased efficiency. Leonard’s statement in section 5.4.6 confirmed this observation by securing the speed of making a decision to an emotional “trust your gut” process.

6.3.4.3 Risk / control

Being in control of his/her businesses increases an entrepreneur’s confidence. One of the control mechanisms that Stuart has in place within his business allows him to defer to the board of directors, which gives him a feeling of comfort. Another example of how control mechanisms provide an entrepreneur with confidence is Melissa’s example of having her staff receive a sign-off from her before engaging in any risky activities. Having that level of control gives Melissa the confidence that her employees are not going to make critical mistakes that could damage her business. Structures like this give entrepreneurs the confidence to pursue opportunities.

6.3.4.4 *Influence*

When an entrepreneur has been influenced by either another person or company it gives them confidence that they are making good decisions. In the case of being influenced by another person, Simon provided an example in section 5.4.7 where an outsider confirmed something he was already thinking. Trevor explained how using an existing, established brand to leverage a new brand provided support to the new brand. Kent provided an example of how a business in an unrelated industry influenced him and his business. In the last case, seeing a business model working elsewhere gave the entrepreneur confidence to apply it to his/her own business.

6.3.4.5 *Environmental factors*

Environmental factors are predominantly reactions to an existing set of circumstances. Entrepreneurs typically have little control over most of the environmental factors with which they have to deal, for example, the regulatory environment their business operates in. In section 5.4.10 Leonard provided an example of how he identified a business opportunity by reacting to inefficiencies in an industry he already had experience in.

Market size and conditions were the most common environmental factors the interviewed entrepreneurs mentioned. Taking advantage of the existing market conditions is another confirmatory example of how entrepreneurs react to their circumstances.

6.3.4.6 *Commitment*

Commitment is strongly related to confidence. The more an entrepreneur commits to a course of action, the stronger their confidence in their ability to take advantage of that situation.

6.3.4.7 Balance

When entrepreneurs make use of the balance heuristic they are trying to create a specific reality for themselves. Robert and Gail provided examples in section 5.4.13 where they discussed achieving a state of equilibrium and the concept of a lifestyle business.

6.3.5 Summary of findings

The conceptual model below was constructed by mapping each of the heuristics discovered in section 6.2 against the benefits they deliver to the entrepreneurs discussed above.

Figure 4: Heuristics and the benefits they provide



What is interesting to note is that there is no link between the frequency of observations of the heuristics and the benefits they provide to the entrepreneurs. The most frequently observed heuristic and the least frequently observed heuristic both delivered the same theoretical benefit to the entrepreneurs that made use of those specific heuristics.

6.3.6 Conclusion to research question 2

Research Question 2 sought to understand the influence heuristics have on entrepreneurs and how they assist entrepreneurs in the decision-making process. The data from the study emphasised three benefits that entrepreneurs gain when making use of the heuristics identified in section 6.2. These benefits are increased efficiency, raised levels of confidence and the ability to either react to a given set of circumstance or to create a new reality.

6.4 Discussion of Research Question 3

Being a successful entrepreneur is not only about identifying and pursuing the right opportunities. Decisions about what opportunities should be passed on are just as important. These decisions include higher-level strategic decisions about what kind of businesses to invest in as well as various decisions within their businesses.

Some opportunities are perceived as being unlikely to succeed from the start and it is quite an easy task for an entrepreneur to decide not to pursue them. However, many opportunities are seen as potentially successful and the entrepreneurs have to decide how to allocate their limited resources most effectively.

6.4.1 Reasons for not pursuing identified opportunities

Much of the data collected discussed reasons why specific opportunities were not pursued at all and why some that were pursued had failed. However, in response to a specific interview question about how to evaluate potentially lucrative opportunities, the entrepreneurs in the study mentioned many items for consideration.

Ross mentioned an example where he weighed up the benefits of putting the required effort into his existing business *versus* starting a new business and decided that working in the established business would elevate him towards his goals.

- **Ross:** *“It gets to a point where it’s a practical decision saying, is that am I better off investing in this to get this kind of a little bit closer, you know, to take me closer to freedom? Or does the new thing do it?”*

Sean explained a process of trying to find reasons why an idea will not work and stated that unless he is able to generate something that is significant enough to stop him from pursuing the idea, he will continue to explore it.

- **Sean:** *“By how quickly you can find a reason that it won’t work. A strong reason that you can then back up with a little bit of research to prove that the idea is not feasible and that is, the first thing I do when I think of an idea is think of all of the reasons why I can’t do it. If I can come up with enough decent and without lying to myself honestly with enough good answers to think why it would work, I then explore it further but I can come up with one massive issue, I stop.”*

Stuart provided an example where, in his business, they can stick to one commodity or diversify into various others. His final decision is made based on his assessment of other successful businesses in the industry and what they have decided to do and ultimately he decides to copy their strategy.

- **Stuart:** *“So we can choose to keep going down that road and keep doing anything that comes our way or we can stick to coal and be specific in coal and my feeling right now is that we’ve got to look at sticking to coal and ignoring everything else which is a tough decision because you never know as an entrepreneur what will work and what will not. So at the end of the day, it’s a very, very, very difficult decision to make and why do I say we go to coal, well the guys who got it right say we must stick to one thing, so I’ll put my money where they are.”*

Robert, Simon and Michelle all discussed the importance of market factors when evaluating business opportunities. These factors included the size of the market, the cost of entry and the amount of competition. Simon elaborated on competition further by stating: *“No competition is bad, too much competition is bad. So a little bit of competition is good because it’s a validation of your idea”*.

- **Robert:** *“We look at how developed the market is, so the States for example for us is very evolved, so lots of competition or a lot more competition, much harder dependent, it’s like very expensive. China, massive market, very little ... in fact no competition for us, much, much cheaper to stay and... so we look at the cost of entering the market. That’s why China was our first choice, the cost of entering the market, the size of the market and the competition ... those were the main three things that we looked at. “*
- **Simon:** *“The first and most important thing is market size.”*
- **Michelle:** *“I would first try and asses the need for it and then asses, the marketability, you know, how big the market would be and then the cost of it. Is it, is it worthwhile producing it, can the..., you know would it be marketable?”*

Trevor examined the lifecycle of the product the business is selling and makes a decision based on the longevity of the business and the key differentiators that enable that product to survive against impending competition.

- **Trevor:** *“when I see a business and people get excited about it, I try to scratch on top and really understand what is your differentiator going forward, what’s the lifecycle of that business? Because the value of that business is equal to the lifecycle of that product. So if I see a great product, I see, ok, how long will this product survive and the longer the product can survive, the more money I’m going to make.”*

Thabi analysed the source of the opportunity and evaluated the company and the people involved.

- **Thabi:** *“I think it also depends where the opportunity is coming from and where is it coming from, who is bringing the idea, yes that is very critical. Like if it’s a company, what is this company, what is the background, what is the future in this company, is there a future? If it’s an individual I also look at who is this individual, do they have experience or expertise in their area”*

Melissa made judgements about opportunities based on the financials. If it is an existing business she wants to analyse past performance and compare that to other businesses in the same industry. If it is a completely new idea she wants to interrogate the financial projections.

- **Melissa:** *“The financials, I would look at the financials, I would look at projections, all of the financials, what has been done previously, if it has been done, look at other companies that, you know, that are in the same kind of sector, how they’re doing, the kind of market share, what percentage of that particular market would this new company potentially get, what piece of the pie could we get back, those are the kinds, so it’s the financials, it’s the financials.”*

When talking more generically about choosing between two or more options the entrepreneurs conveyed the following list of issues they would consider:

- Product features
- Finance terms (from suppliers)
- Ownership of intellectual property

6.4.2 Conclusion to research question 3

Apart from the obvious non-starters, there are a myriad of reasons why entrepreneurs decide not to pursue some of the opportunities they encounter. When the entrepreneurs in the current research study were asked how it was possible to distinguish between a potentially profitable business opportunity and opportunities that were likely to fail they all came up with different factors they would consider before making a determination. The only area where there was some consistency was with regard to market conditions and more specifically, the size of the market for their product or service. It therefore follows that entrepreneurs decide not to pursue opportunities for different reasons and attempting to create a comprehensive, all-encompassing theory would prove difficult, if not impossible.

Interestingly, all of the factors mentioned by the entrepreneurs interviewed in the research study are practical considerations. While this finding doesn't directly contradict Baron (2008), Foo (2011) and Welpé et al. (2012) whose studies were concerned with the emotional factors that influence opportunity evaluation, it does suggest that practical considerations are more important than emotional considerations when entrepreneurs are evaluating business opportunities.

6.5 Discussion of Research Question 4

Research Question 4 aimed to discover whether there were differences between the way male and female entrepreneurs make decisions about business opportunities. As the study was exploratory in nature, concepts identified were emphasised for discussion and further research is necessary to determine the extent to which the emergent constructs are both evident within different contexts and reliable enough to be applied generally.

6.5.1 Differences between the way male and female entrepreneurs make decisions about business opportunities

Of the twelve entrepreneurs interviewed for this study only four of them were female. This constitutes a significant limitation to the study's generic applicability. The following results require further investigation before a conclusive theory can be established.

Generally, it appeared that both male and female entrepreneurs make use of all the above-mentioned heuristics when making decisions about opportunities (refer to Appendix C for a complete count of each heuristic per interview respondent). There was however one heuristic that was more prominent within the group of female entrepreneurs than male entrepreneurs. The balance heuristic was only recognised as being important once the researcher commenced with the analysis of the interviews with female entrepreneurs.

Additionally, female entrepreneurs seemed to be driven by a higher purpose, whereas male entrepreneurs did not make any mention of their motivation for being in business and their desire to be successful. This finding relates into another sub-domain of entrepreneurship literature, namely entrepreneur motivation. Jayawarna, Rouse and Kitching (2013) constructed entrepreneur motivation profiles by examining the effect of three external factors on the entrepreneur; career life course, household life course and business life course. While career and business life courses could be gender neutral, household life courses are significantly different for men and women.

Two of the female entrepreneurs interviewed had explicit stories and plans to execute on their vision of their higher purpose. Gail's intention is to sell the company to her staff at some point in the future and Michelle's entire business was built because she wanted to help underprivileged women develop a skill and then have a place to use that skill in exchange for an income.

There was a case of a male entrepreneur talking about "giving back" to a community of entrepreneurs but it was not the driving force behind the way he makes decisions.

6.5.2 Conclusion to research question 4

On the surface it appeared that there are very few differences between male and female entrepreneurs when it comes to making decisions about business opportunities. However, due to the exploratory nature of the study and the small sample (only four of the twelve entrepreneurs were female); a robust theoretical position could not be reached.

The most evident difference between the two genders was the prevalence of the balance heuristic. Female entrepreneurs were significantly more concerned with creating balance in their lives than the male entrepreneurs. Although this finding is consistent with the relevant literature (DeMartino & Barbato, 2003; Gupta et al., 2012), further research into the differences between the way male and female entrepreneurs make decisions about opportunities would lead to a more substantive theory.

6.6 Additional Insights

The following section briefly discusses three additional insights that were gained through the process of the Grounded Theory study. As these insights were not the focus of the study, a very limited discussion is presented. Further research into these findings is necessary.

6.6.1 Bad decisions

Eight of the twelve entrepreneurs interviewed used hiring of staff members as their example of bad decisions. Mostly, the discussion around bad decisions related to hiring decisions but in one case it was around the decision to embark on a restructuring process.

- **Robert:** *“Hiring is hard. Hiring is very hard to find the right people and I mean once we’ve hired them, we keep a close eye on them for the first couple of months.”*
- **Trevor:** *“I think during the restructuring process... I have to decide on who are the core people. So I essentially got in my two main guys and said to them, alright, potentially you know the business will, the market will change...either you lower your salary or you retrench somebody.”*

The other four entrepreneurs provided examples that related to things that wasted their time, bad financing decisions and taking action before the money was in the bank, not focussing their business early enough, giving away equity too easily and allowing proposals to be sent to a client without first checking them.

There was however also a distinct theme that emerged of ‘there’s no such thing as a bad decision’. All decisions, no matter the outcome, delivered some benefit to the entrepreneurs. Sean explained a process where he spends time assessing the bad decision and the impact it has on him and his company with a view to learning from his mistakes.

6.6.2 Motivation to start their business

Some of the entrepreneurs who were interviewed started their businesses because they wanted to be entrepreneurs/business owners. Others just fell into being an entrepreneur because of the circumstances surrounding the opportunity that resulted in their first business. There were no cases of necessity entrepreneurs – entrepreneurs that started businesses for survival reasons (Carsrud & Brännback, 2011) within the sample of entrepreneurs in the study.

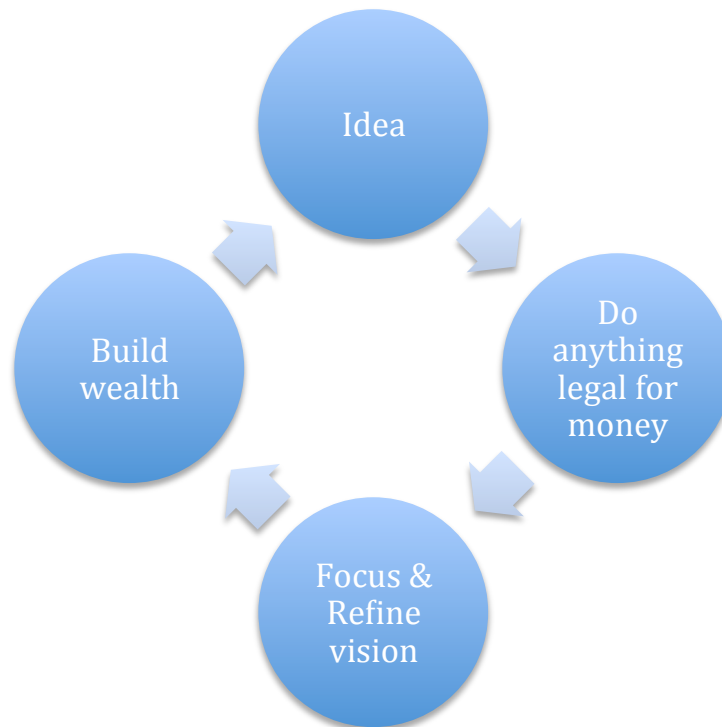
6.6.3 Lifecycle of an entrepreneurial venture

An interesting outcome of the research conducted is a model for the lifecycle of successful new businesses. As depicted below in Figure 5, a successful new venture goes through four distinct stages:

- Idea,
- Do anything legal for money,
- Focus and refine vision, and lastly
- Build wealth.

These four stages must occur in the sequence outlined below. Once a business has reached the point where it is relatively stable and can focus on wealth creation the entrepreneur is able to commence the search for new opportunities.

Figure 5: Lifecycle of successful new businesses



6.6.3.1 Idea

Almost all of the entrepreneurs interviewed agreed that the idea itself is of very little importance when it comes to the success or failure of a new business. The real differentiator is the amount of effort the entrepreneur is willing to invest and the specific skills they are able to contribute towards the new venture along with their network.

6.6.3.2 Do anything legal for money

This second phase of the new business is very important in terms of generating cash flow that will sustain the business in the short term. Through a process of trial and error, the business will discover its true competence and the activities that provide the most value for their customers. At this stage of the business' life, it will respond to almost every request it receives from its customers.

6.6.3.3 Focus and refine vision

Once the company has established itself and discovered its true competency and most effective income producing activities, the business is able to narrow

the focus and discard less profitable activities and clients. By focusing on the best activities the business and the entrepreneur can continue to develop specialist skills and be positioned as a leader within the specific niche of the market.

6.6.3.4 Build wealth

The long-term focus of most successful businesses is to build wealth. Depending on the entrepreneur's goals, the wealth creation may be purely for the entrepreneur's own account (as is the case when they want to build a business with the goal of selling it), or for the company's account (as is the case when the entrepreneur continually reinvests in the company and seeks to acquire other businesses both vertically and horizontally).

CHAPTER 7: CONCLUSION

7.1 Introduction

The previous chapter discussed the results of the Grounded Theory study in light of the literature on heuristics and entrepreneurial decision-making. This chapter will commence with recapitulation of the research problem and presents a summary of the key findings from the study. This chapter then provides some recommendations for entrepreneurs, the limitations inherent in the current study are discussed and some ideas for future research are posed.

7.2 Background to the research problem

Research into entrepreneurship has had many different focus points, including character traits of entrepreneurs, entrepreneurial orientation within a firm and internationalisation of entrepreneurial firms, amongst many others. This study gained a deep insight into the way entrepreneurs make decisions and more specifically, how they make decisions about business opportunities. Heuristics was the theoretical perspective used to conduct the study with the aim to create a new Grounded Theory.

The researcher decided to undergo this research as he is an entrepreneur and wanted to establish a manner to help him discern between opportunities that should be pursued and ones that should be passed on. As such, the primary purpose of the study was to understand how successful entrepreneurs make decisions about opportunities. Understanding how successful entrepreneurs make decisions will help nascent entrepreneurs make better decisions and improve their chances of building successful businesses – something that is desperately needed in South Africa due to the high level of unemployment.

7.3 Summary of key findings

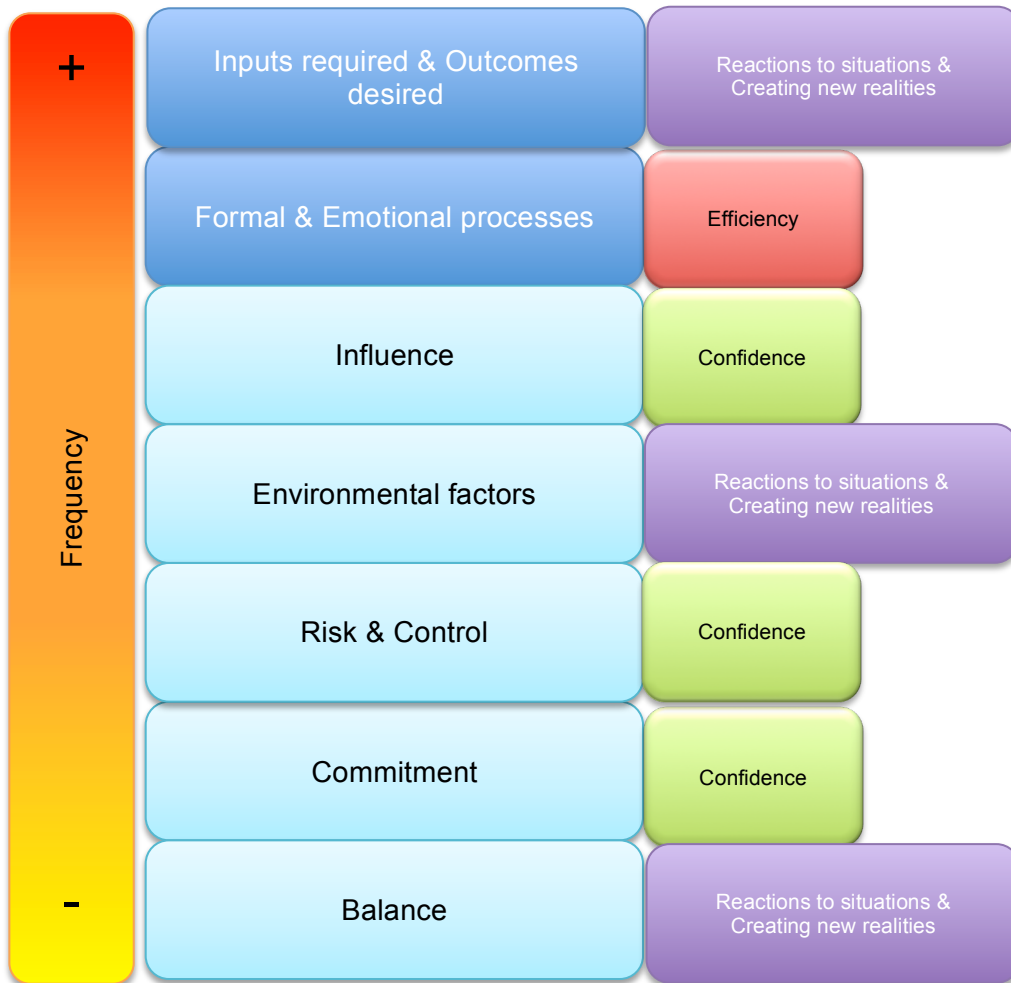
Twelve in-depth interviews were conducted with successful entrepreneurs from a variety of different industries. Data collected was analysed using thematic analysis with the aim being to develop a new Grounded Theory. Results from the study demonstrated that entrepreneurs frequently make use of heuristics when making decisions about business opportunities.

7.3.1 Conceptual model of the heuristics employed by entrepreneurs when making decisions about business opportunities, and the benefits they provide

The conceptual model that forms the basis of the new Grounded Theory is presented below. Due to the nature of the study being qualitative and exploratory, the sample used to develop the new theoretical model was relatively small and further research should be done to test this conceptual model on a larger sample of entrepreneurs.

The model presents each of the seven heuristics that were identified during the research process along with the specific benefit they provide to entrepreneurs. The heuristics are ranked according to the frequency with which they were evident in the data collected during the interview process.

Figure 6: Heuristics and the benefits they provide to entrepreneurs when making decisions about business opportunities



7.3.2 Further insights gained from the research process

Although the purpose of the research study was to research the way in which entrepreneurs utilise heuristics when making decisions about business opportunities, an interesting model for successful new businesses emerged from within the data. As this was not the focus of the study it has merely been presented and briefly discussed. Further research could examine this validity and usefulness.

7.4 Recommendations for entrepreneurs

The original aim this research sought to address, was to help entrepreneurs make better decisions about business opportunities. An interesting, unintended outcome was a sentiment that while the idea is an important element of entrepreneurial success, it is only a very small element. More important than a great idea is the willingness to work hard and to get things done. Additionally, businesses evolve over time. The original idea that was used to start the business is seldom the idea that makes a business successful.

Recommendation 1: Do not spend too much time worrying about the idea. Start working and focus on the first three or four steps of the business product or service.

Recommendation 2: Understand the way in which heuristics influence the decision-making process and the specific benefits of each heuristic. This will improve overall efficiency, confidence and the ability to correctly react to a given set of circumstances or create a new desired reality.

In addition to the above practical recommendations for entrepreneurs, there is also a theoretical recommendation for entrepreneurship scholars.

Recommendation 3: The conceptual model developed in the current study is not the end of the research process but rather the starting point. Scholars interested in entrepreneurial cognition research should make use of it in future research.

7.5 Limitations

In addition to the two research limitations mentioned in section 4.8 the following limitations were also identified:

The sample of entrepreneurs interviewed was of a relatively small size. While this sample size is sufficient to conduct an exploratory study it is not sufficient to confirm the theoretical robustness of the novel conceptual model.

Female entrepreneurs only accounted for four of the interviews conducted. This is a severe limitation of the study that imposes restrictions on the generic applicability of the findings specifically related to gender differences.

7.6 Suggestions for future research

By making use of the Grounded Theory methodology, a set of seven heuristics was developed that entrepreneurs utilise when making decisions about business opportunities. A rank-ordered table was not developed as the purpose of this study was to identify the heuristics and understand how they are utilised. Therefore an idea for a future study would be to use the heuristics developed here and test them empirically in a quantitative study.

In the introduction to this research paper two highly relevant concepts were introduced. Firstly, the problem of South Africa's unemployment levels was discussed and secondly the concept of "Gazelles", being high-impact firms that create employment opportunities was introduced. According to Acs et al. (2008), firms considered to be Gazelles have an average age of twenty-five years. There is therefore a significant time gap between start-up companies and Gazelles. Research regarding the decisions that were made in the first 25 years of a business that is considered to be a Gazelle would reveal very interesting insights regarding how successful entrepreneurs make decisions and this would have conceptual links to the current study.

7.7 Conclusion

This research set out to discover the ways in which entrepreneurs make use of heuristics when making decisions about business opportunities. Seven heuristics were discovered and an analysis of what direct benefit they provide was completed. A conceptual model was developed as a starting point to be used in future studies to empirically test the prevalence and relevance of these heuristics and the benefits thereof.

At the beginning of this process the researcher believed that one of the true secrets to entrepreneurial success lay in the quality of a specific business idea and that the process of evaluating that idea was critical. After discussing the concept of business ideas and opportunities with twelve successful entrepreneurs that perspective has been somewhat altered. The business idea or opportunity is only the starting point and it is not a very important contributor to success. Successful entrepreneurship is more about taking action and continually making adjustments to the overarching strategy. These are the important decisions and successful entrepreneurs are able to make them with relative ease and speed.

- **Kent:** *“Well I think with the years you learn to make more instinctive decisions. Its a bit like Malcolm Gladwell, that Ten Thousand Hours book. After quite a few decisions you start instinctively seeing the patterns and seeing things, that somebody who just starts out in a business might not be able to see.”*

Decision-making, like everything else in life, is a skill that gets better with practice.

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APPENDIX A: INTERVIEW SCHEDULE

1. Decision making Style

- 1.1 How do you make decisions in your business?
- 1.2 Can you provide an example?
- 1.3 When you need to choose between two alternatives, how do you go about doing this?
- 1.4 Provide an Example.
- 1.5 How would you categorise groups of decisions?

2. Process to overcome bad decisions

- 2.1 What was the last bad decision you made?
- 2.2 What impact did it have on your business?
- 2.3 How did you overcome making the decision?

3. Opportunity Identification

- 3.1 Where do business ideas come from in your experience?
- 3.2 Where did the idea to start your business come from?
- 3.3 What made you decide to start the business?
- 3.4 What other business ideas have you had that you didn't start?
- 3.5 Why didn't you pursue them?
- 3.6 When considering a new business opportunity, do you prefer similar or vastly different to your current business? Why?
- 3.7 How can you tell between a potentially profitable business opportunity and one that won't succeed?

4. Opportunity Evaluation

- 4.1 If a family member/close friend approached you with a business opportunity, what things would you look for / use to evaluate the idea?
- 4.2 Has this ever happened to you?
- 4.3 Explain what happened.

APPENDIX B: LIST OF INITIAL CODES

- 2 hour explanation test
- almost everything is a decision
- background information
- business idea - lots of technical details
- calculated risk
- can't remember reason for failure
- Categories of decisions
- clients & competitors
- clients = business
- confidence in ability mitigates risk of business failure
- creative thinking
- decision making process
- desire to diversify
- different businesses diversify/spread risk
- different levels of investigation into new ideas
- dissimilar business
- do same but better
- don't stop at the status quo t..
- downside evaluation
- dream killers
- effect of personal life on business
- Ego?
- example: good product, bad service
- failure of product vs. failure of service
- financial considerations
- financial investment
- financial investment more valuable than time investment
- financial upside
- financial vs. operational
- finding similarities in businesses in different industries
- first bad decision = staffing problem
- Future growth
- future investment needs
- Future value of investment
- gather info then take time to process
- growth and improvement through bad decisions
- gut feeling
- hardworking
- have to understand idea - simplicity
- Hierarchy
- higher investment = less chance of abandonment
- honesty in opportunity rejection test
- how it adds value more NB than how it makes money

- human resources
- Iceberg effect of bad decisions
- idea's currently being pursued
- idea death - lack of focus
- idea good in theory until researched more
- Ideas are not scarce
- ideas judged by past experience and personal knowledge/skills fit
- implement processes to avoid duplicating bad decisions
- implication: current business is not "what I like"
- importance of elevator pitch and simplicity
- importance of personal conduct
- income vs. time
- incremental innovation business
- initial and future
- jockey more important than horse
- lack of focus
- lack of good people
- lack of trust for lowly valued individuals
- large failure rate for ideas
- Logic
- Logically = no, other considerations relevant
- long lasting effects of bad decisions
- long term contract
- long term vs. short term view
- look for people similar to self
- looking for similarities elsewhere in the business
- low risk appetite
- low risk idea as first business
- low value placed on others opinions
- luck?
- maintenance of relationship
- make more money than being employed
- many ideas
- market need
- me and the other person
- Must first pass a negative test
- networking, socialising
- never failure, always learning and growing
- new innovation more risky
- new opportunities
- new product business ideas are harder to implement than incremental innovation ideas
- no formal obligations and dependants
- no formal structure
- once bitten, twice shy
- open mental state
- opportunities are always out there, people must be open to the

- Origin of new ideas - social setting
- own ideas more likely to be followed up on than someone else's idea if vastly different to existing skill set/business
- pass on idea when impossible to overcome major issue
- People = biggest decision criterion
- people valued higher than product/service
- perceived to be an expert
- personal character traits
- personal constraints
- personal knowledge
- personal similarities
- personal values projected onto others
- physical product ideas
- possible impact on other non-related relationships
- Pro/Con
- problem solver
- rational vs. intuitive decision making
- Reasoning
- re-evaluate decisions periodically
- relaxed
- Resources
- return on investment timeframe
- risk
- service delivery ideas
- similar business
- simple instant explanation
- specific person has impact on decision
- Speed of failure
- start-up phase decided on 'fun'
- stress is not good for opportunity identification
- structure
- support of friends/family
- take time to make decisions
- technical ability is an order qualifier
- Thorough analysis based on personal experience
- Time investment
- transfer of passion
- tried and tested
- Uncertain about where he looks for opportunities
- uncertainty about potential success
- underlying reasons/assumptions that caused bad decision making
- understand possible impact on relationship
- upfront investment
- Upside potential
- Value of learning from mistakes stressed
- value of person/relationship only goes so far
- value of simplicity and explainability
- weighing pros/cons

- willingness to invest hierarchy: 1 skill, 2 time, 3 money
- won't go into industries with zero knowledge of risks
- youth as advantage
- 25% of time lost to bad decisions
- 3 year life cycles
- a few more resources/inputs needed
- A/B testing
- acceptance of bad decisions being made
- albeit to easily undo bad decisions on some scale
- bad decision = people hired
- bad decisions lead to inefficiency in overall success of business
- bad HR decision has large effect
- balance of charging too much/little
- better decisions upfront have big impacts later on
- blue ocean strategy
- business advantage by being different
- business experience creates value
- business grew into new areas that are closely linked to original business
- business idea came from emphasis on training in the market
- business model decisions = big decisions
- business partnerships more important than money
- business people must understand money
- business vs. project decisions
- businesses in pairs are better businesses
- businesses that are hard to explain are less likely to succeed
- can't avoid making the same bad decisions over again
- Categories of decisions
- considerations of start-up different to going concern
- constraint: cash
- constraint: resources
- constraints limiting decisions
- copying suppliers businesses while improving on them internally
- creating duplication to reduce work load
- decision life span
- decision making process dependent on size of business
- decisions are made based on entrepreneurs desires or survival
- decisions are made quickly
- decisions made in heard intuitively, not on paper
- decisions that lead to reusability are good
- decisions with long life spans become policies
- distinction between decision categories not considered

- difference between managers and entrepreneurs
- different types of business
- does new idea or existing business take you closer to freedom?
- doing research on possible acquisitions from a distance
- ease of use without losing value
- easier to stick with existing business than start a new one
- effect of HR decision depends on type of business
- efficiency over "trying something new"
- employee productivity key in making profit
- entrepreneur been in three very different industries
- entrepreneur has an idea for his wife to run
- Entrepreneur makes decision on business not in business
- entrepreneur must own the idea
- entrepreneur prior to current business
- entrepreneurial role requires motivation
- entrepreneurs less accountable to others with their decisions
- entrepreneurs make blink decisions
- entrepreneurs mustn't be put off by the notion of selling time
- everything in a small business..
- example of business partnership based on who the person is
- example of complicated business
- example of simple business
- example to reinforce importance of reusability
- excess cash spent on growth
- existing business vs new idea - where is effort best spent
- explains business in 6 words
- fixed time
- Full autonomy for team to make decisions
- government backing training industry
- guessing / estimating
- hard to find good partners when the business has been running for a while
- have a heart for what you're doing
- have a plan but be flexible enough to change it as necessary
- have to say "no" to self often
- hobby idea turned into "real" business
- hobby on the brink of becoming a real business
- ideas can be dismissed early based on where they come from
- ideas don't come from formal presentations, its more subtle
- imagining new ideas and possibilities
- industry is fragmented limiting opportunity
- industry veterans more able to see opportunities

- instinctive decision making
- it's not about the money
- job role and entrepreneurial role are different
- jockey more important than horse
- later stages of thinking/research will incorporate tools
- likelihood of failure increased by level of complication of idea
- long life span decision
- lots of other business ideas that weren't pursued
- making decisions as going along
- managing employees to perform at their best
- mentor/judge on entrepreneurial competition (exposure)
- mid-course corrections instead of overhauls
- More important business decisions take longer, more process
- more potential than reality
- more than just surface level
- most approaches from money people looking to do deals
- new business is about taking the next step
- new ideas that are similar to existing business have higher chance of getting started
- no red tape to get things done
- no set decision making model/process
- no shortage of ideas
- not best idea to blindly enter a new industry
- not ego driven
- not following a formal strategy "word-for-word" regarding decision making
- not interested in "finance only" deals
- notional time
- ok to sell other peoples time
- on such thing as serial entrepreneur (opinion)
- only 1 instance of vertical integration
- only gets involved with non-critical decisions when personally interested
- operating decisions vs everything else
- opportunities come from in depth knowledge of an industry
- other entrepreneur has multiple businesses seems successful so willing to partner with
- outsider thought lots of opportunity existed
- people who don't follow through are less likely to succeed
- perception of the entrepreneurs capabilities is important in deciding to consider or not
- perception vs. reality
- peripheral opportunities that make use of existing resources and revenue channels
- possibility of being raised to be different

- pressure to ensure business performs
- previous business in different market and different country
- Processes for HR, spending money decisions
- product envy
- product: same thing in a different format
- quickly resolve bad decisions
- rather have a small share of a bigger business
- real money closer in existing business than in new idea
- real vs. notional time
- realises the value of personal time
- recognition that the future is uncertain
- research options before making bigger decisions
- simple businesses are a good start
- simpler businesses are more likely to be looked into
- skills shortage in SA
- some decisions have very long lifespans
- sponsorship
- start simple then add complexity
- super margins if work is accelerated
- survival of current business dominates exploring new ideas
- systematic approach to pricing
- tend towards things that are different
- test options when unsure of best decision
- the final product may change
- the process could be subconscious
- throw money at bad decisions
- time span to endure outcome of decision considered
- ultimately it's about getting things done
- undoing bad decision with lowest possible risk
- use past experience to judge person
- using time as a basis to estimate workload
- valuable skills in entrepreneurs: can do attitude
- valuable skills in entrepreneurs: reliability
- value in exploring businesses similar to current
- value of experience is important
- value of innovation because of lack of industry experience
- vertical integration opportunities
- very clear about what the business is and does
- wanting to be different
- wanting to go against the grain
- will dismiss ideas based on "bad" people
- will take a "risk" based on who is

- bringing the idea
- wish list
 - wishful progression of business
- won't get involved in overly complex ideas

APPENDIX C: COUNT OF THEMES

A summary depicting the prominence of the twelve themes is included in the table below:

Figure 7: Count of themes

	Sean	Ross	Stuart	Leonard	Robert	Kent	Trevor	Simon	Gail	Thabi	Melissa	Michelle	Totals
Balance	0	2	0	0	1	4	1	0	5	0	0	0	13
Categories of Decisions	5	17	3	11	4	5	5	4	3	3	4	3	67
Commitment	7	8	5	4	14	2	9	9	3	2	2	1	66
Control	2	1	2	6	3	1	11	3	4	1	4	4	42
Emotional Processes	8	15	18	14	0	7	9	13	12	7	6	3	112
Environmental Factors	2	10	9	13	9	11	14	9	0	3	6	2	88
Formal Processes	30	24	16	14	10	21	16	6	14	7	16	9	183
Influence	21	12	11	15	9	14	10	14	20	12	20	10	168
Inputs Required	42	32	16	31	18	18	37	10	21	10	5	3	243
Outcome Based	21	26	19	12	22	29	21	8	18	8	4	5	193
Reasons for not pursuing opportunities	2	0	1	2	2	4	4	3	1	2	2	1	24
Risk	7	1	2	4	2	2	2	4	3	4	5	0	36