Opportunity Formation among Nascent Entrepreneurs

A Qualitative Study from a Business University in Rwanda

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Abstract

Entrepreneurship is a broad field, and there seems to be no agreement about what it includes. In developing countries entrepreneurship is seen as a way to foster private sector growth and economic development as it may bring jobs and new technology. However, the exact impact of entrepreneurship on an economy is not well known, and not much research is done about entrepreneurship in developing countries.

Many researchers have pointed out that the concept of opportunity is a crucial element of entrepreneurship, and so are the individuals who form and exploit these opportunities. Enhancing individuals to foster entrepreneurship may be done through education. Rwanda has improved its macro level environment for doing business, but the Rwandan government recognizes that there is a lack of appropriate entrepreneurship education in the country.

The purpose of this dissertation is to contribute to the developing country entrepreneurship literature and the debate about appropriate entrepreneurship education, particularly in Rwanda. It does so by looking into how university students from School of Finance and Banking (SFB) in Kigali, Rwanda, form opportunities when they are starting up businesses.

Opportunity formation is studied through a developed theoretical framework consisting of causation and effectuation combined with other concepts from the opportunity formation literature. Causation and effectuation are two processes for opportunity formation that have emerged in the entrepreneurship literature. Causation is characterized by focusing on the end-product whereas an effectuation process focuses on available means. The processes are combined with four factors that influence the opportunity formation process, namely; motivation, knowledge, capital and network. Combining the two processes with the four influencing factors has helped operationalize the processes and proved beneficial for understanding the complexity of the opportunity formation processes of the students. This study shows that determining whether actions and decisions belong to a process of causation or effectuation is not always easy and will depend on how the processes are operationalized.

The opportunity formation processes of eight entrepreneurs studying at School of Finance and Banking are studied by applying qualitative methods including semi-structured interviews, diaries and observations.

The overall conclusion is that the students mostly applied effectuation when they formed their opportunities. However, signs of causation can also be determined. The participants did not make comprehensive opportunity search, accurate predictions, competitive analysis or followed a specific plan, which are all part of a causation process. They were not driven by one specific opportunity or venture and they were willing to change their goals. Further, as in effectuation they formed their opportunities based on controllable knowledge about markets from former work experience or from being customers in the market. From studying at SFB the students gained knowledge about the market for students, resulting in them starting businesses with students has target customers. Start-up capital came from non-formal channels and investments were more based on available capital and what the participants could afford to loose, as in effectuation than on predictions about returns as in causation. The students made use of their network to decrease uncertainty, as in effectuation and to get access to resources, as in causation.

The entrepreneurship course at SFB seems to be built on a causation logic. However, designing entrepreneurship education that facilitates both causation and effectuation seems appropriate. Thus, facilitating effectuation processes might prove beneficial for SFB in order to achieve its goal of enabling more people to become entrepreneurs.

Content

Chapter 1. Introduction

Entrepreneurship may facilitate employment and bring innovation and technology to a country, which might have a positive effect on the economic development (Gürol & Atsan, 2006; Naudé & Havenga, 2005; Acs & Virgill, 2010). Thus, creating environments that may foster entrepreneurship have become a focus in developing countries (Acs & Virgill, 2010). Enhancing entrepreneurship can be done on a macro level, through implementation of laws and regulations favourable to businesses and on a micro level by training individual entrepreneurs. As pointed out by Naudé and Gries (2010a), education is needed for entrepreneurs to take advantage of opportunities and facilitate the development of a country.

In Rwanda, entrepreneurship is seen as a way to transform the economy from an agricultural based economy to a knowledge based economy (Republic of Rwanda, 2000). On a macro level, the overall business environment in Rwanda has recently improved, and in the World Bank´s ranking of business parameters, Rwanda is way in front of the average of Sub-Saharan African countries (World Bank, 2011a). At a micro level, the Rwandan government recognizes that there is lack of appropriate entrepreneurship education in the country, and supporting individual entrepreneurs, for example by improving the educational system, is high on the country's agenda as it is seen as a way forward for the desired development of the country (Republic of Rwanda, 2000).

This dissertation contributes to the debate about how to design appropriate entrepreneurship education. Based on the assumption that knowing what entrepreneurs do makes it easier to support them, this dissertation study what entrepreneurs, who are currently pursuing a business education, actually do when they want to start a business, thereby taking a micro level perspective on entrepreneurship. The micro level perspective shall offer an insight into processes and individuals thoughts and actions (Brundin, 2007).

1.1 Problem Field and Research Question

Studying entrepreneurship is complicated by the fact that there does not seem to be consensus on what the term entrepreneurship actually covers (Spring & McDade 1998, Jack & Anderson 2002; Gartner, 1990 cited in Ucbasaran et al., 2001). However, there does seem to be agreement that "the opportunity" is a key concept and that a fundamental questions within entrepreneurship is how entrepreneurs form opportunities (Short et al., 2010, Gaglio & Katz, 2001, Shepherd & DeTienne, 2005, Fletcher, 2006; Murphy, 2011; Sarasvathy, 2007; Shane & Venkataraman, 2000). The behaviour of individuals is seen as crucial for the existence of entrepreneurship, as it is when they form and exploit opportunities that entrepreneurship exists (Mueller, 2007; Shaver, 2010; Shane et al., 2003). Rwanda, with its improving business environment and intentions of supporting individual entrepreneurs, seems to have a good foundation for increasing entrepreneurial behaviour. Entrepreneurial behaviour is at the core of this dissertation that sets out to study how business students at a university in Kigali, the capital of Rwanda, form opportunities when they start their new ventures. In doing that it fills three gaps that have been identified in the current entrepreneurship literature:

First, understanding the process of opportunity formation is underdeveloped in the literature (Fletcher 2006; Davidsson & Honig, 2003). Recent literature points out that it is important not just to look at the psychological characteristics of the individual entrepreneur, but take a holistic view on entrepreneurship, including the actions, process and context involved in the opportunity formation process (Jack & Anderson, 2002; Davidsson & Wiklund, 2001; Korunka et al., 2003; Dimov, 2007). This dissertation does study the individual entrepreneur, but instead of looking at characteristics and intentions of the entrepreneur, it focuses on the actions taken by the individuals, and on the processes they go through when forming opportunities. As actions at a micro level are influenced by the macro level environment, and the entrepreneurial opportunity formation process therefore is influenced by the context where it takes place (Davidsson et al., 2001), this dissertation also integrates the wider context, which is the business university; School of Finance and Banking (SFB), in the developing country; Rwanda.

Another important reason for including the context in this dissertation is that entrepreneurship research done in least developed regions is limited (Naudé, 2007), and for Rwanda it is simply non-existent (Naudé & Havenga, 2005). This is the second identified gap. According to Bruton et al. (2008) most of past research within entrepreneurship is from a Western perspective and the academic work on this topic is meager at best, and we therefore know little about entrepreneurship in developing countries, especially Sub-Saharan Africa. In developing countries the context is different from developed countries and theories developed in Europe and North America might not be suitable (Bruton et al., 2008; Spring & McDade, 1998). Therefore, when entrepreneurship is studied in a developing country it is important to pay attention to both the context and the applicability of Western theories.

Finally, the third identified gap concerns the choice of methods. Several researchers have asked for a broader use of qualitative for the study of entrepreneurship (Hindle, 2004; Gartner & Birley, 2002). This dissertation applies multiple qualitative methods including interviews, diaries and observations to collect data from the Rwandan university students.

Contributing to filling these gaps, the following research question has been developed:

How do students at School of Finance and Banking in Rwanda form opportunities when they are starting up businesses?

1.2 Definitions and Delimitation

The concept of opportunity takes many forms in current entrepreneurship research. Regarding the emergence of opportunities, the literature is mainly split between two views; a view stating that opportunities are discovered, and one stating that opportunities are created by entrepreneurs. "Forming opportunities" is used in this dissertation to convey both discovery and creation. Further, opportunity formation includes every action the entrepreneur takes as a part of acting upon his or her business idea (Dimov, 2007). For the purpose of this dissertation an opportunity is defined in accordance with Singh who defines an opportunity as:

> "A feasible, profit-seeking, potential venture that provides an innovative new product or service to the market, improves on an existing product/service, or imitates a profitable product/service in a less-than-saturated market" (Singh, 2000 cited in Singh, 2001, p. 11).

This definition allows an opportunity to be identified before it has proved to be profitable, and thus this dissertation does not consider the performance of the actual firms. The definition also classifies an opportunity as leading to a potential venture, which is in line with this dissertation's focus on the process of opportunity formation within nascent entrepreneurs and not within existing firms. Nascent entrepreneurs are defined as people who engage in activities that may eventually lead to the creation of a firm (Aldrich & Martinez, 2001; Delmar & Davidsson, 2000). Finally, the definition implies that an opportunity may refer both to innovation and imitation.

1.3 The Theoretical Lens

The process of starting up a new business is often dynamic and complex, and contains many different activities and decisions, which many researchers have tried to explain (Korunka et al., 2003; Schumpeter, 1934). Two processes for business start-up or opportunity formation have emerged in the entrepreneurship literature. The first derives from a planning school of thought and sees entrepreneurship as a rational, planned and linear process of opportunity discovery and exploitation (Shane & Venkataraman, 2000; Bhave, 1994, Bird, 1988, Jenkins & Johnson, 1997 cited in Kraaijenbrink et al., 2008). According to this view, entrepreneurs rely on predictions and develop their businesses based on a specific, predefined goal. Another approach, which originates from an emergent-learning approach, considers entrepreneurship as a means-driven and more circular process (Kraaijenbrink et al., 2008). Sarasvathy (2001) has further developed these two approaches, that she calls causation and effectuation. These two processes will be applied to answer the research question by looking upon how the two processes are applied by the participants in this study.

Effectuation and causation are processes and processes are complex to study. To operationalize and concretize the processes, effectuation and causation are in this dissertation combined with other concepts from the opportunity formation literature. These are motivation, knowledge, capital and network, which are called influencing factors as they influence the opportunity formation process. Together they form the theoretical framework for this dissertation.

1.4 Structure of the Dissertation

In the next chapter general literature about entrepreneurship and the concept of opportunity is reviewed and the theoretical framework is presented. This is operationalized in an analytical framework at the end of the chapter which will be used to analyze the students' opportunity formation processes in chapter five. Before the analysis, the applied methodology is described in chapter three and in chapter four, the context, in this case the developing country Rwanda and the business university, School of Finance and Banking is presented. After the analysis follows a discussion on the empirical and theoretical findings and the practical implications of this study. Finally, chapter seven presents the conclusions.

Chapter 2. Reviewing the Literature and Presenting the Applied Theories

This chapter reviews literature relevant to the topic of this dissertation and presents the theories applied to analyse the data. First, general literature focused on entrepreneurship and opportunity formation is reviewed to clarify and understand the concepts of entrepreneurship and opportunity formation as these are widely discussed and not well defined phenomena. Afterwards the theories behind the two processes effectuation and causation and the four influencing factors; motivation, knowledge, capital and network are presented. Where literature specifically for developing countries exits, it is included. The theories will be combined and operationalized in an analytical framework at the end of the chapter.

2.1 Entrepreneurship as a field of Opportunity Research

In the literature, there seems to be no consensus on what the field of entrepreneurship covers (Spring & McDade 1998, Jack & Anderson 2002; Gartner, 1990 cited in Ucbasaran et al., 2001), and thus no general theory of entrepreneurship (Gartner, 2001; Grebel et al., 2003; Murphy, 2011). Therefore it is important to clarify what is meant by the term in any research dealing with entrepreneurship.

An important paper in the entrepreneurship literature was written by Shane & Venkataraman (2000). They link entrepreneurship to opportunities and define research on entrepreneurship as, "the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane & Venkataraman, 2000, p. 218). Busenitz et al. (2003) suggest an approach to entrepreneurship that is a nexus of opportunities, individual & teams, and mode of organising within a wider context. They conclude that the only dimension in their nexus that exclusively belongs to the study of entrepreneurship is the concept of opportunities. However, as their approach suggests, entrepreneurship contains more than the study of opportunities.

One discussion is whether entrepreneurship is a behaviour or an occupation (Naudé & Gries, 2010b). In the behavioural view the entrepreneur is characterized by a specific behaviour. This view can be traced back to Schumpeter (1934), who defines the entrepreneur as someone who creates disequilibrium in the market and acts as an agent for change. In this view, the entrepreneur does not necessarily introduce new products or means of productions, rather, he combines existing resources in a new way that is more efficient than before (Schumpeter, 1934). This view can further be linked to the term intrapreneurship, which is about finding new solutions for already existing firms or organization (Schultz, 1975 cited in Naudé, 2008), or as Davidsson & Wiklund (2001) formulate it; exploiting opportunities within existing firms. According to them entrepreneurship is about emergence, but what emerges is not necessarily a new organisation, but some form of new economic activity.

According to the occupational perspective, the entrepreneur is someone who is self-employed instead of taking on wage employment or being unemployed. This view could be broadened to include nascent entrepreneurs who have not yet created their firms (Breslin, 2008a). In this view the entrepreneur does not have to be an agent for change or an innovator. Aldrich & Martinez (2001) think that too much focus has been given to the entrepreneur as an innovator and suggest that most nascent entrepreneurs start as reproducers or imitators.

Another issue within the broad field of entrepreneurship is whether entrepreneurship is merely a micro level issue, such as the creation of organisations, or if it also incorporates macro level societal issues (Davidsson et al., 2001). The macro level perspective looks at the impact entrepreneurship has on the economy and recognizes that not all entrepreneurial activity has a positive impact on the economy of a country (Naudé, 2008). This view may be especially important for policy makers who need to know the role of entrepreneurship on the economy and societal development (Davidsson et al., 2001).

No matter which of the views one takes, McMullen & Shepherd (2007, p.1) state that, "entrepreneurship requires action." Action is also in this dissertation seen as crucial for the existence of entrepreneurship, which is defined by combining the behavioural and the occupational view. This dissertation looks at the behaviour of nascent entrepreneurs, but defining entrepreneurs as being either self-employed or nascent entrepreneurs and as both innovators and reproducers. Further, entrepreneurship is dealt with on micro level, leaving the impact of entrepreneurship on society out.

2.1.1 Entrepreneurship and Opportunities in Developing Countries

Not much research within entrepreneurship has been done in a developing country context (Naudé & Havenga, 2005). However, the amount of research is increasing as it has become clear that entrepreneurship may play an important role in economic development (Naudé & Havenga, 2005). Ho and Wong (2007 cited in Naudé, 2010) write that, “there are more entrepreneurial opportunities in developing countries” and Naudé (2009 cited in Naudé, 2010) found that this is matched with the high rate of start-up entrepreneurs. Therefore there should be a good basis for studying nascent entrepreneurship in a developing country context.

In existing entrepreneurship literature done in Africa, entrepreneurship is often defined as self-employment, and entrepreneurship research and small business research is also often seen as equivalent, where small businesses dominate the private sector (Naudé & Havenga, 2005).

A common framework for studying businesses, including entrepreneurship, in developing countries is the institutional theory of the firm (Peng, 2002; Hoskisson et al., 2000; Stephen et al., 2005; Naudé, 2010), as business activity in a country is influenced by its institutional environment (Naudé, 2010; Stephen et al., 2005; Amorós, 2009; Acs et al., 2008). Establishing proper institutions that create an enabling business environment can reduce transaction and information costs for start-up businesses (Hoskisson et al., 2000). Therefore, if the institutional environment improves, the amount of business start-ups might increase.

According to North (1990 cited in Peng, 2002, p 252) institutions are, “the rules of the game in a society” and an institutional framework is, “the set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange and distribution” (Davis and North, 1971 cited in Peng, 2002, p. 252). Institutions may be formal or informal. Formal institutions are, for example, the rule of law, property rights, contract enforcement and good governance (Naudé, 2010). Informal institutions are norms and behaviours within a society. North (1990, cited in Peng, 2002) suggests that where formal institutions fail, informal will take over.

In developing countries the institutional business environment is often characterized by high start-up costs, high regulatory burdens, high taxation, difficulties doing business, and a lack of physical or informational infrastructure (Naudé & Gries, 2010b). The lack of strong legal frameworks affects the ability to enforce property rights and contracts, which also influences operating businesses (Hoskisson et al., 2000). Further, macro-economic instability increases uncertainty and risk for firms in developing countries, which may have difficulties in supporting entrepreneurs (Acs & Virgill, 2010). Starting a firm may therefore require extra resources, which may lead entrepreneurs to enter already established markets (Acs & Virgill, 2010).

2.2 Opportunities and their Formation

In the literature there seems to be agreement that the concept of opportunity is a key concept in the entrepreneurship field and that focusing on the behaviour of the entrepreneur regarding opportunity formation is an interesting and important topic to study (Short et al., 2010, Gaglio & Katz, 2001, Shepherd & DeTienne, 2005; Eckhardt & Shane, 2010; Shane & Venkataraman, 2000; Murphy, 2011). However, it also seems that there is no consensus or common theory around the concept of opportunity, both regarding what an opportunity is, and how entrepreneurs and opportunities are connected (Ardichvili et al., 2003; Dimov, 2007; Alvarez et al., 2010). Many expressions have been used to describe the phenomenon. Is it opportunity identification, development, recognition, discovery or creation? These verbs all give a different nature to both the opportunity and the process it involves (Dimov, 2007), which makes it a rather complex phenomenon to study (Ardichvili et al., 2003). The discussion has roots in a philosophy of science debate, where opportunities can be seen through a realist or a constructivist perspective. Recently also an evolutionary realist approach has emerged (Alvarez et al., 2010).

In the realist perspective, opportunities are caused by exogenous changes in the market and are seen to exist independently of the entrepreneur as an objective phenomenon. The job of the entrepreneurs is to discover the opportunity and exploit it, which he or she is able to do because he or she possesses more knowledge and information about the market than others (Alvarez et al., 2010). As written by Alvarez et al. (2010, p. 26):

> "The basic ontological position of the realist discovery view of opportunities is that these opportunities exist independent of individual's knowledge of them, and that this knowledge can be acquired."

In the realist perspective, opportunities exist because of asymmetry of information among people (Shane, 2003). This view also implies that information exists regardless of the people who posses that information. It thereby takes the view that both opportunities and information exist as independent phenomena (Gartner et al., 2003). This view is suggested by, among others, Shane & Venkataraman (2000) who state that the field of entrepreneurship involves two phenomena;

the individual entrepreneur and the existence of opportunities, what is called the individual/opportunity nexus. In this view, "opportunities are an economic circumstance where if the correct good or service were to be properly organized and offered for sale the result would be profitable" (Eckhardt & Shane, 2010, p. 48). Opportunities will differ in terms of economic value. Some will generate huge financial returns while others will only be able to sustain one individual (Eckhardt & Shane, 2010). This approach originates from the Austrian economist Kirzner (1975 cited in Deakins & Freel, 2009) to whom an entrepreneur is someone who takes advantage of opportunities in order to create profit. According to this perspective there is a limited amount of opportunities waiting to be found by upcoming entrepreneurs, who posses enough information to see them, because they, according to Kirzner (1973 cited in Casson & Wadeson, 2007), possess entrepreneurial "alertness" which makes them able to discover them (Ardichvili et al., 2003; Gartner et al., 2003). Thus, if an opportunity is not discovered it is because no one was alert enough (Gartner et al., 2003).

In the realist discovery perspective an opportunity exists when goods or services can be sold at a profit (Shane & Venkataraman, 2003). However, whether an opportunity has to be profitable is also discussed. If an opportunity is defined by it being profitable it implies that an opportunity cannot be classified as an opportunity until the outcome is known (Dimov, 2007). Singh (2001) comments that defining opportunities as profitable is problematic, because this will only become clear post hoc the exploitation of an opportunity. He suggests that researchers should not solely be concerned with what they perceive as successful opportunities, as this is difficult to asses. Further, according to Singh (2001), an opportunity turning out not to be profitable, may have to do with other factors than the opportunity itself, for example the actions taken by the entrepreneur. This view is based on a more constructivist perspective of the opportunity.

In a constructivist perspective opportunities are formed through the entrepreneur's interpretation of the opportunity, thereby the opportunity and the entrepreneur cannot be separated (Alvarez et al., 2010). The opportunity is created by the entrepreneur through his or hers interpretation of what can be created with available resources in the given environment (Alvarez et al., 2010). According to this perspective, an opportunity does not exist until the entrepreneur has created it (Ardichvili et al., 2003; Short et al., 2010; Alvarez & Barney, 2007; Gartner et al., 2003).

The last view, the evolutionary realist approach is similar to the constructivist perspective in many respects. What differentiates it is that action is essential. The entrepreneur forms the opportunity through his or her actions; actions which are determined by the responses from consumers and the market (Alvarez & Barney, 2007; Alvarez et al., 2010). This implies that it is not possible to define an opportunity until an entrepreneur has acted (Alvarez et al., 2010). Aldrich & Martinez (2001) also question whether a prior identification of opportunities is appropriate when dealing with nascent entrepreneurship. In line with this view, Sarasvathy et al., (2010) define an opportunity as consisting of three elements; (1) an idea that might lead to an economic end, (2) believing that the ends can be achieved, and (3) actions that generate those ends through new economic artefacts. They also point out that an opportunity requires that someone perceives it as such and further, that it only has meaning when someone acts upon it in the real world. In this view opportunities are not a limited box of ideas (Ardichvili et al., 2003), but the amount of opportunities will depend on the people who are able to create them. Therefore, being able to create opportunities becomes important for the entrepreneur, and the actions he has to take will be different from the ones connected to discovery of an already existing opportunity (Ardichvili et al 2003, Alvarez & Barney 2007). This view is in line with the cultural cognitive school identified by Companys & McMullen (2007), where, "opportunities are subjective phenomena that are defined and enacted by entrepreneurs through social interaction" (Companys &McMullen, 2007, pp 305-306).

Short et al. (2010, pp. 55) suggest a definition where some opportunities are created and some are discovered. They expect the literature will be moving towards this perspective. Murphy (2011) also developed a framework that incorporates both views as he believes that opportunities reflect aspects of both a realist discovery and a constructivists or evolutionary realist creation view. Thereby, he also states that opportunity formation is a process that may contain both discovery and creation and that these two are not in opposition to each other (Murphy, 2011).

This dissertation takes a view similar to that of Murphy's and Singh's, namely that opportunities may be both discovered and created and they may be profitable or not. However, the actual opportunity and whether it is discovered, created, profitable or not profitable is not the main focus of this dissertation. Rather, this dissertation focuses on the process by which opportunities are formed and in doing that it applies the processes of causation and effectuation to the opportunity formation processes of nascent entrepreneurs. These will be presented in the next section.

2.3 Effectuation versus Causation

This dissertation applies the two processes causation and effectuation to the actions of business students who are nascent entrepreneurs. The process of causation is what is presented in many text books and thus what most business schools teach (Brinckmann et al., 2010; Chandler et al., 2011). Sarasvathy developed the process of effectuation based on an experiment where experienced entrepreneurs were thinking aloud about typical problems and decisions in connection to starting up a new venture.

Causation is in line with planned strategy approaches. In a causation process the firm takes its starting point in an identified opportunity which may be discovered by searching relevant markets. As in the realist view on opportunities, opportunities may in causation be identified a priori. Different opportunities are analysed by taking steps such as doing market and competitive analyses, selecting a target segment and designing marketing strategies (Sarasvathy, 2001). The opportunity with the highest expected return is selected and implemented. The entrepreneur tries to predict the future, and success or failure will depend on the accuracy of the prediction (Sarasvathy and Dew, 2005). The end-product, the desired firm, is a result of the initial opportunity identified by the entrepreneur (Sarasvathy and Dew, 2005). According to Sarasvathy (2007), in a causation process, the entrepreneur chooses between existing means, or creates the suitable new means for the predefined firm. The process has a clear goal and plan, and efforts are spent on achieving that predefined goal (Chandler et al., 2011). Resources and stakeholders for the implementation will be acquired according to the developed plan. This approach argues that resources are used more effectively, and that goals are more easily achieved when the business is well-planned. Further, as planning relies on predictions it prepares the firm for future challenges (Brinckmann et al., 2010). The theoretical foundation of a causation process originates from the rational decision making perspective of neo-classical economics, where humans make rational decisions based on all relevant information (Chandler et al. 2011). Figure 1 below shows how a causation process may proceed.

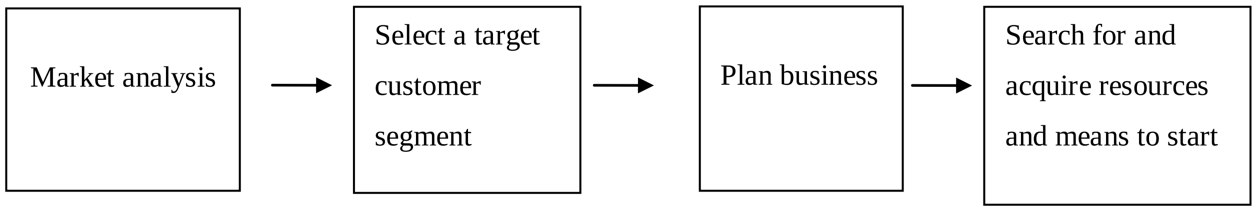

Figure 1: The Causation Process (own creation)

The causation approach is what many text books contain and thus also what many universities teach. Business students are taught how to do market research, business plans, marketing strategies etc. (Brinckmann et al., 2010; Chandler et al., 2011; Bhide, 1992). Even though the business plan, with its step by step rationality, originates from causation, it does not necessarily imply that the entrepreneur behind a business plan is working entirely through a process of causation. This is shown by Kraaijenbrink & Ratinho (2011) who made a study looking for signs of both causation and effectuation in business plans, thereby showing that business plans may apply to both causation and effectuation.

Effectuation takes a learning approach to the firm, arguing that planning is a waste of resources, which can be spent better on resource mobilization or organizational development (Brinckmann et al., 2010). A process of effectuation takes a starting point in the entrepreneurs' currently available means. Sarasvathy (2001) formulates these as the questions: Who am I? What do I know? and who do I know? From these questions the entrepreneur will form his or her opportunity; an opportunity which is not specified, but will be created through actions. Thus, effectuation takes a similar view on opportunities as the evolutionary realist view. In an effectuation process, the entrepreneur may or may not start with an opportunity. According to Sarasvathy & Dew (2005, p. 544), "the opportunity gets produced through a process that continually transforms existing realities into possible markets." However, Kraaijenbrink (2008) points out that both effectuation and causation can apply for existing markets and products as well as where new markets and products are developed. In a process of effectuation, the opportunity has not been identified by searching the market, but may come out of any situation or event in the entrepreneur's life, or out of being pushed into self-employment (Sarasvathy, 2001).

In effectuation an opportunity is not defined a priori and therefore, the entrepreneur will not be able to calculate the expected returns of his or her actions. Instead the entrepreneur will control his or her actions and work according to what will be an acceptable loss (Sarasvathy, 2001). In an effectuation process there is no need for predictions because the nature of the firm is not known, but will depend on, among other things, the commitments of stakeholders. For example, who the entrepreneur meets or knows will determine in which direction the entrepreneur is going and which firm is being created (Sarasvathy, 2005). Further, depending on which customers and partners get involved combined with contingencies that the entrepreneur meets, the firm's goal and target may change. This is in line with what Aldrich & Martinez (2001) suggest is the reality for nascent entrepreneurs, namely that, as most nascent entrepreneurs start with scarce resources, their goals will change according to which resources they are able to acquire.

In an effectuation process, a specific customer segment is not identified from the beginning, but the first customer becomes the target customer. The effectuator listens to customers and other partners and adjusts the firm accordingly (Sarasvathy, 2001). Alliances with stakeholders will reduce uncertainty and entry barriers without making a competitive analysis. The process is shown in figure 2 below, where the means leads to the goal, and stakeholder commitment leads to both new means and new goals.

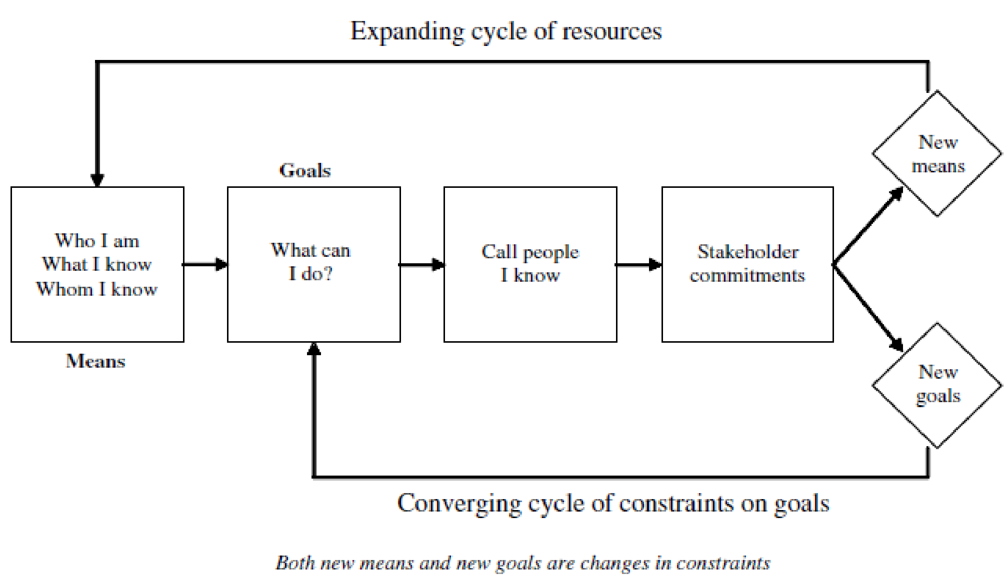

Figure 2: The Effectuation Process (From Sarasvathy, 2001)

Both causation and effectuation processes start with some sort of end-goal, for example to start an importing firm. However, in a causation process, the entrepreneur chooses between means to reach a particular end, whereas in effectuation the entrepreneurs uses a particular set of means to reach one out of many possible ends (Sarasvathy, 2001). As mentioned, in causation the end-product is known from the beginning and determined by the discovered opportunity. According to Sarasvathy (2001), it thereby assumes that the future is predictable and that entrepreneurs know what they want from the beginning, and can start exploring the market for a specific product or service by making analyses that will help them identify their opportunity (Sarasvathy, 2001). However, this may not be the case for effectuators who start with an idea and maybe a desire of becoming their own boss or making a bigger profit for themselves. An effectuator knows which means he or she has and starts acting based on these. According to Sarasvathy, an effectuator is:

> "an imaginative actor who seizes contingent opportunities and exploits any and all means at hand to fulfil a plurality of current and future aspirations, many of which are shaped and created through the very process of economic decision making and are not given a prior" (Sarasvathy, 2001, p. 262).

Which of the processes is best for performance is not well documented. Kraaijenbrink et al. (2011) for example concludes that neither of the two processes can be associated with growth and that both of them may lead to success. Which one is most suitable will depend on the situation and circumstances, and it may be the right combination of the two that leads to success. For example, as new firms have limited resources they might benefit from limiting costs on market analysis and research in order to avoid loss. Further, nascent entrepreneurs may lack experience, information and time and therefore it may be difficult for them to evaluate opportunities and make adequate assumptions about markets and customers when entering a new market, which might make causation an inadequate process (Brinckmann et al., 2010). This is in accordance with what Kraaijenbrink and Ratinho (2008) found, namely that effectuation was mostly followed by nascent entrepreneurs.

According to Sarasvathy, effectuation is preferable if an entrepreneur only has, "the generalized aspiration of building a successful business of her own with relatively limited access to resources" (Sarasvathy, 2001, p 249). In general, business planning should be adapted according to the firm specific context (Brinckmann et al., 2010). Brinckmann et al. (2010) state that for firms operating in unstable or uncertain environments, as is the case for many new firms, too much planning and strategy determination will make the firm too rigid and inflexible. Similarly, according to Sarasvathy (2001), effectuation is preferable in dynamic and nonlinear environments whereas causation is useful in an environment that is static and linear.

This dissertation is not interested in which of the two processes is the best, but in determining how the processes are actually applied by nascent entrepreneurs in Rwanda. The processes have not been empirically tested by many researchers. To operationalize and clarify what to look for within the two processes, this dissertation combines them with factors, identified in the opportunity formation literature, which may influence the opportunity formation process. This is corresponding to what Chandler et al. (2011) suggest, namely that future research should explore the relationship between the processes of effectuation and causation and other determinants such as experience and education. The next sections present these influencing factors.

2.4 Influencing Factors

This study includes the four influencing factors motivation, knowledge, capital and network. These four are chosen based on existing literature indicating them as important for the opportunity formation process. Further, according to Naffziger et al. (1994), entrepreneurship is a multidimensional process and many dimensions of the process should be studied to be able to gain understanding of it. These four factors will be explained below.

2.4.1 Motivation

Several researchers have pointed to the fact that motivation plays a main role in new venture creation and that research on entrepreneurship not including motivation is incomplete (Herron and Sapenza cited in Segal et al, 2005; Shane et al., 2003).

Farmer et al. (2009) link an entrepreneur's motivation with the entrepreneur's desired future status, meaning that an entrepreneur is someone who has certain aspirations about who he or she wants to become. They conclude that actions of entrepreneurs are linked to these aspirations. Naudé & Gries (2010b) suggest that an opportunity can be a means to live the life that one desires. Entrepreneurs may be motivated by non-financial benefits such as personal independence or control, and therefore choosing to become an entrepreneur might not be due to a desire for the most profitable way of making a living (Shane, 2008 cited in Eckhart & Shane, 2010). Gatewood, Shaver and Gartner (1995 cited in Shaver, 2010) identified four motivations for becoming an entrepreneur. These are, (1) the desire to become ones own boss and be independent, (2) use ones knowledge and experience, (3) an identified market need, and (4) for financial gains. A study done among female U.S. firm founders showed that independence was their most important motivation (Hisrich, 1985 cited in Segal et al., 2005). Such factors have been called pull factors. These may be linked to other motivational concepts identified in the literature such as a high need for achievement (Eckhardt & Shane, 2010; Korunka et al., 2003) and locus of control (Gürol & Atsan, 2006; Eckhardt & Shane, 2010; Korunka et al., 2003). People may also be pushed into entrepreneurship due to negative factors in their environment, such as unemployment and the resulting lack of ability to generate a salary in wage employment (Benzing, 2009) or job dissatisfaction (Segal et al., 2005). A study done in the Netherlands shows that a high unemployment rate results in a higher amount of start-ups (Bosma et al., 2005 cited in Naudé & Gries, 2008).

Some studies also suggest that individuals coming from either families or environments which encourage self-employment will be more likely to start up businesses than those who do not (Davidsson & Honig, 2003; Giannetti and Simonov, 2004; Dunn and Holtz-Eakin, 2000 cited in Naudé & Gries, 2008).

Motivation in Developing Countries

Motivations for going into entrepreneurship may be different in developing countries than in Western counties. This may be due to the difference in living conditions, and thus push factors, such as unemployment, may be even stronger in developing countries, where there are no social security nets to compensate for lack of income (Benzing, 2009). Further, wage jobs are often temporary and without contracts, which makes life unstable (Naudé & Gries, 2010b). Maybe also therefore, contrary to the norm in the West, African entrepreneurs often run more than one business as a way to spread the risk (Spring & McDade, 1998). However, a study done among Vietnamese Small and Medium sized Enterprises showed that they were more motivated by challenge and achievement than security (Swierczek, 2003).

Data from the Global Entrepreneurship Monitoring (GEM) makes a distinction between opportunity and necessity entrepreneurship. Opportunity entrepreneurship is characterized by being a choice you make to take advantage of an opportunity. Necessity entrepreneurs, on the other hand, do not have any other choice than going into entrepreneurship to make a living (Reynolds et al, 2002). According to the data, it is the latter kind of entrepreneurship that is mostly present in developing countries because people are pushed into entrepreneurship to sustain themselves and their dependents (Bhola et al., 2006; Acs et al., 2005). This distinction has been criticized by Rosa et al. (2008) who found that necessity is not a main motive behind businesses in developing countries and nor does necessity lead people to start a business. They found that poor Ugandan and Sri Lankan entrepreneurs become entrepreneurs to improve their social and economic standing. Their results also showed that the poorer the people, the less likely they were to engage in business start-up. They further criticized the questions that were asked in the study, stating that the respondents may not have understood the concepts of opportunity and necessity.

2.4.2 Knowledge

Possessed knowledge has been identified as an important factor for opportunity formation by many researchers (Shane, 2000; Shane & Venkataraman, 2000; Shepherd & DeTienne, 2005; Fiet et al., 2005) and according to Aldrich & Martinez (2001) many start-ups begin with nothing else than knowledge. This dissertation puts special focus on knowledge about entrepreneurship gained from university education, as the participants in the study are business students.

Knowledge refers to, “an individual’s distinctive information about a particular subject matter” (Shepherd & DeTienne, 2005, p. 3) and among other things may make people act more intuitively, take faster decisions, and focus on the important information, which then leads them to form opportunities (Shepherd & DeTienne, 2005). Knowledge may be about markets, sales techniques, supplier relationships, or about customers.

Knowledge may come from experience, for example from having been a customer, manufacturer or supplier in a specific market (Shane, 2000; Ardichvili et al., 2003). It may also come from education, which is regarded as general knowledge and facilitates a person’s ability to accumulate new knowledge, whereas knowledge from experience is regarded as more specific knowledge (Shepherd & DeTienne, 2005). Many researchers have found a relationship between education and the possibility of becoming an entrepreneur, and also between former labour market or former entrepreneurial experience and the possibility of becoming an entrepreneur (Davidsson & Honig, 2003).

Entrepreneurs may acquire information or knowledge about opportunities by searching for it (Eckhardt & Shane, 2010). Believing that searching is valuable is a product of the discovery view, as opportunities do not exists a priori in the creation view and it would therefore not make sense to search for them. Fiet et al. (2005) suggest that entrepreneurs will increase the possibility of discovering opportunities if they search for them. The search should be focused in fields where they already have knowledge, they should use known information channels and the search should be done systematically.

According to Shane (2000) people who possess information or knowledge will be able to see opportunities even without searching for them, because the information and knowledge that they have help them recognize and interpret new information. This belongs to the view that due to asymmetry of information, or an imperfection in the market of information, in society some people have more information about markets and resources and they are therefore able to exploit opportunities and make a profit (Shane & Venkataraman, 2000; Fiet & Patel, 2006; Eckhardt & Shane, 2010). This asymmetry of information leads to the entrepreneur's belief that the value of resources would be higher if exploited in a different way (Eckhardt & Shane, 2003). According to Shane & Venkataraman (2000) the difference in knowledge, or information, among people is a crucial factor in understanding how and why people form opportunities. Similarly, Hayek (1945 cited in Sarasvathy et al., 2010) states that no individual possesses the same knowledge at the same point in time, which gives rise to opportunities and may explain why some form opportunities and others do not. According to Shane (2000), knowledge will determine which type of opportunities an individual entrepreneur will be able to discover or create. It is important to note that an underlying assumption for this view is that the information about opportunities exists independently from the individual who will access and apply it (Gartner et al., 2003).

In a more constructivist view, it may be the difference in perception of an opportunity that leads some people to form opportunities. As Endres & Woods (2007) argue the formation or identification of opportunities by entrepreneurs includes subjectivist judgments by the entrepreneur about the profitability of that opportunity. As Dimov (2007, p. 277) also states, “not all individuals will react to the same information in the same way,” meaning that humans will not take the same decisions even though they possess the same information (Dimov, 2007).

Knowledge from University Education

Naudé & Gries (2008) suggest that educated entrepreneurs may have easier access to credit, be better at identifying their market and have higher social standing and therefore better networks. Davidsson & Honig (2003) found that actual business education becomes important in the exploitation phase.

Several studies cast doubt over whether entrepreneurship education at universities provides the right skills for people who want to become entrepreneurs (Co and Mitchell, 2006). The reason is that focus should lie more in education *for* entrepreneurship than *about* entrepreneurship (Kirby, 2004). For example, teaching students subjects such as marketing, business plan development, entry strategies, financing, legal and tax issues is important but not sufficient for enabling students to become entrepreneurs. Focus should also be on developing their minds and behaviour by providing education in communication, creativity, leadership and social networking (Kirby 2004). Further, the teaching approach, the pedagogy, is also important and Gibb (2002) argues that the teaching methodology itself has to be entrepreneurial. This can be done by giving students ownership of their own learning, using real-life scenarios and exposing the students to role models.

A study done by Dew et al. (2009), suggests that what is taught at universities and in MBA programmes is not adequate for facilitating entrepreneurship. The conclusion is based on the difference between what is being taught in MBA programmes and what experienced entrepreneurs actually do.

Not much research has been done about entrepreneurship education in general or at university level in particular in developing countries, especially Sub-Saharan African countries have been left out, excluding South Africa (Kabongo and Okpara 2010). Lack of education has been identified as a constraint to entrepreneurship in developing countries, and Elkan (1988 cited in Acs & Virgill, 2010) found that education would help African entrepreneurs to move into the formal sector. Therefore, it seems that there is a need for educating entrepreneurs (Kabongo & Okpara, 2010; Gürol & Atsan, 2006).

Entrepreneurship education in Africa focuses on small business management and is done in a traditional setting (Co and Mitchell 2006; Kabongo and Okpara 2009). Kabongo and Okpara (2009) suggest that universities should promote entrepreneurship education that changes the mindset of students. Dana (2001) comes to the same conclusion from exploring the field in transition economies in Asia. She finds that working with entrepreneurship education in such countries requires more than simply managerial teaching.

2.4.3 Capital

Availability and access to finance is important for the start-up process of new firms (Marlow & Patton, 2005). However, research argues that getting access to start-up capital through bank-loans and investors is not easy for new firms (Kim et al., 2006; Mueller, 2007). They are high-risk and small firms, thus lenders do not want to finance them or they compensate by making the borrowing cost high (Kim et al, 2006). Therefore, start-ups often use other ways of financing. Kim et al. (2006) suggest that nascent entrepreneurs often use personal capital as collateral or they finance their business start-up with own or family savings. Their study explores whether household income and wealth in the US influence the transition into entrepreneurship, and they conclude that neither household wealth nor income have an influence on the likelihood of becoming an entrepreneur. Mueller (2007) came to the same conclusion in his study done in Germany. This shows that having access to financial resources does not influence the choice of becoming an entrepreneur. However, it does not show what influence the size of wealth has on *how* entrepreneurs start up their new ventures. Åsterbro & Bernhardt (2003) found that start-ups in the US that are funded with bank loans are less likely to survive than start-ups funded with other kinds of loans. They also found that entrepreneurs financing their new ventures with bank loans have less education and experience.

Kim et al. (2007) point to the fact that many new firms do not require a high amount of start-up capital. Nascent entrepreneurs may start their businesses in their homes and thus do not need a separate office (Kim et al., 2006). In line with that Bhide (1992) believes that entrepreneurs should not focus so much on raising money for their start-up, rather they should find ways of operating with a small amount of money. He also points out, “that starting a business with limited funds requires a different strategy and approach than launching a well-capitalized venture” (Bhide, 1992, p 113). With limited funds, entrepreneurs may imitate other firms, which save the cost of market research. Further, they may not profit from following a well-planned strategy, rather they should be willing to take advantage of emerging opportunities (Bhide, 1992).

Capital in Developing Countries

Access to finance is also discussed in business literature in developing countries, and some research suggests that entrepreneurs in African countries are even more constrained by lack of access to finance (Atieno, 2009; Mambula, 2002 cited in Acs & Virgill, 2010), which challenges the growth and development of small businesses (Hernández-Trillo et al., 2005). This might be due to lack of collateral and underdeveloped financial institutions to facilitate start-up capital for new ventures (Davidsson et al., 2001). However, Diomande (1990 cited in Spring & McDade, 1998) suggests that Western companies can actually learn from African business-men, who are able to start businesses with very few resources. Research has found that often the investment to start up an enterprise in developing countries comes from the networks of the entrepreneur such as family and friends and not from bank loans (Naudé & Havenga, 2005; Spring & McDade, 1998; Khavul et al., 2009).

2.4.4 Network

Adding a network approach to the study of entrepreneurship arose as an acknowledgement of seeing the entrepreneur as part of a broader context, and has roots in social network theory (O'Donnell et al., 2001). Network is included in this study because, as suggested by Dubini and Howard (1991), entrepreneurship is a networking activity.

There are different views on who belongs to an individual’s network. Is it everyone that the person knows or has known? Is it persons who might be able to provide support or is it limited to the persons who actually support the individual? (O'Donnell et al., 2001). In entrepreneurship research it is common to define the network as all relations of the entrepreneur (Arenius and Clercq, 2005; O'Donnell et al., 2001). These are for example family, friends, teachers, customers, suppliers, investors, employees, friends of friends and former colleagues (Dimov, 2007). The network approach has been especially used when describing the start-up of new firms as it might help explaining why some individuals and not others form firms. The size and diversity of a person's network have in particular been studied in past literature (O'Donnell et al., 2001), and has shown that high diversity is an advantage (Aldrich & Martinez, 2001).

Even though Eckhart & Shane (2010) state that empirical research on how social networks influence the opportunity formation of entrepreneurs is limited, many studies deal with the field. For example, Hills et al. (1997 cited in Ardichvili et al., 2003, p. 115) concluded that, ‘‘entrepreneurs who have extended networks identify significantly more opportunities than solo entrepreneurs.” He also identified a link between the network of an entrepreneur and his or her alertness to opportunities; the denser the network the more alert. Davidsson & Honig (2003) also found that networks are positively correlated with the possibility of both starting up a business and the successful exploitation of an opportunity. They even found networks to be more important than having business education.

During the first steps of business start-up an entrepreneur's network may facilitate idea development (Davidsson & Honig, 2003). According to Dimov (2007) the actual shaping of a business idea will always include other actors than the individual entrepreneur, and opportunities are therefore not formed in isolation, but in a social process including all kinds of stakeholders. These stakeholders will determine how the business idea is developed and also if it should be abandoned.

A network can facilitate resources mobilization (Davidsson & Honig, 2003). The entrepreneur will have some resources to start with, but need to complement these through relations and contacts (Greve & Salaff, 2003; Jenssen & Koenig, 2002). Making use of a network is a way for the entrepreneur to gain access to resources at a limited cost (Dubini and Howard, 1991). A network may for example give access to information about new opportunities, help with capital accumulation and provide skills that the entrepreneur does not posses and thereby facilitate the opportunity formation process (Greve & Salaff, 2003; Arenius and Clercq, 2005; O'Donnell et al., 2001; Aldrich & Martinez, 2001). Some studies show that investments more often come from people with whom the entrepreneur has a social relation (Eckhardt & Shane, 2010). A network can also provide motivation and self-confidence to the entrepreneur. According to Breslin

(2008b), networks may be even more crucial for nascent entrepreneurs, who lack credibility and experience. Greve & Salaff (2003) also found that the planning phase, where entrepreneurs prepare their firms, is where they will make most use of their network because it requires very diverse competencies and skills.

Gravonetter´s (1973 cited in Greve & Salaff, 2003) study found that weak ties, such as friends of friends and acquaintances are mostly used for information flows whereas stronger ties, such as family are used for getting resources and support. However, Jenssen & Koenig (2002) also found that strong ties are important for information. Some research shows that relying too heavily on family support may be a disadvantage for nascent entrepreneurs as it might also bring obligations (Renzulli, 1998 cited in Aldrich & Martinez, 2001).

Network in Developing Countries

Networks may be defined differently in developing countries than in Western countries. Regarding the definition of family, distant relatives are in some African contexts as much part of the family as siblings are in many Western countries (Smith, 2009). This may imply that a successful entrepreneur has certain obligations towards his or her extended family, which is enforced by the lack of formal institutions, such as social security nets (Khavul et al., 2009). Especially in the informal sector where proper institutions may be even more limited, norms for doing business may be formed by networks (de Soto, Portes & Haller, 2005 cited in Khavul et al., 2009).

Due to lack of formal well-working institutions, such as banks, African entrepreneurs might rely on informal channels such as their networks for information and access to credit (Atieno, 2009; Acs & Virgill, 2010). Khavul et al. (2009) suggest that as many East African entrepreneurs have few resources they rely on their networks when starting and growing their businesses. Further, small firms in developing countries make use of networks that can enhance information flows among partners concerning their current and future plans and thereby decrease uncertainty (Atieno, 2009; Barr, 2002).

2.4.5 Connections between the Factors

Several factors are included in this study as it prioritizes the holistic view on the opportunity formation process, compromising of course the depth of the influence of each factor. The accuracy of incorporating several factors is shown by them being very interlinked. For example access to knowledge and financial resources may come through a person's network and a network might come from ones education or former work experience. Further, ones motivation may come from ones network and also from a desire to make use of knowledge.

The next section will provides a framework that combines these four factors to the two processes of effectuation and causation and operationalizes them.

2.5 Analytical Framework: Operationalization of the Theories

This section provides a framework for how effectuation and causation can be combined with other concepts from the opportunity formation literature namely; motivation, knowledge, capital and network. To my knowledge such a combination has not been done before. The theoretical framework is presented in figure 3 below, showing that the four factors influence the opportunity formation processes; effectuation and causation. Entrepreneurial activity takes place within a wider social and economic context (Korunka et al., 2003), and the context, described in chapter four, is also included in figure 3.

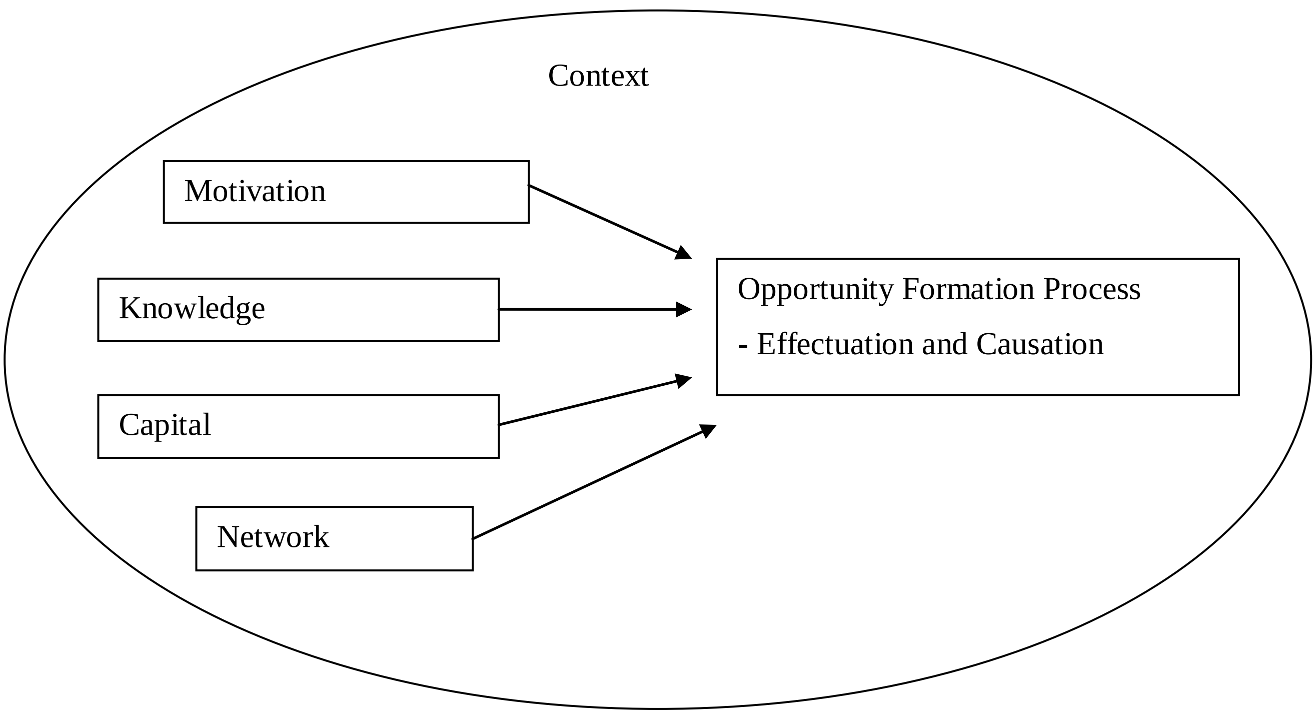

Figure 3: The Theoretical Framework (own creation)

Sarasvathy defined the key differences between the two processes of effectuation and causation, but few researchers have tried to empirically apply them (Chandler et al., 2011). The analytical framework, presented in table 1 below, is developed to operationalize the theories and make them applicable for the analysis in chapter five.

Table 1 distinguishes the two processes based on how Sarasvathy (2001) contrasts them. The table divides the difference between effectuation and causation into three principles: (1) available means versus a specific desired end, (2) control versus prediction, and (3) stakeholder commitment versus market analysis. In the effectuation and causation columns, these principles are specified according to how opportunities are formed within each principle. The last column presents which influencing factor is linked to each principle. The processes and the individual factors are derived from the literature, as described in the above sections. However, the links between them, shown in the last column in table 1, have been derived from a more inductive process, where the collected data helped determining appropriate links. Thus, the analytical framework has been developed through a combination of deductive and inductive processes. This is called a retroductive process (Sæther, 1998), which will be explained in the next chapter concerning methodology. Not all factors are linked to all principles, but only where it, during the analysis, proved to be relevant or where a natural link could be made, such as between commitment of stakeholders and network.

The opportunity formation process corresponding to the first principle is analyzed based on three parameters; each is linked to the influencing factors. The first is linked to the influencing factor, motivation, in the sense that in an effectuation process the entrepreneur is not motivated by a specific identified opportunity, but has general aspirations of creating a firm. Contrary, in a causation process, the entrepreneur will be motivated by a specific identified opportunity. The second parameter is linked to knowledge and network. In effectuation the opportunity is formed based on controllable means within ones current knowledge and networks are used to form the actual opportunity. In causation new means are acquired through searching for knowledge and through networks. The third parameter is not linked to any of the factors, and concerns if the opportunity formation changes goal and exploits contingencies as in effectuation or follows a plan as in causation.

The opportunity formation process corresponding to the second principle is assessed on one parameter and is linked to the factor capital. It concerns whether actions are controlled and the invested capital for the opportunity formation is based on affordable loss, as in effectuation, or if the investment is made based on predictions about expected returns, as in causation.

The opportunity formation process corresponding to the third principle is also assessed on one parameter and is linked to the factor network. In effectuation network is used to create commitments with stakeholders that decrease uncertainty, whereas in causation uncertainty is decreased by making analysis about customers and competitors. Kraaijenbrink (2008) points out that networks and the creation of partnerships are elements of both causation and effectuation. This dissertation makes the distinction in accordance with Chandler et al. (2011), who suggest that in an effectuation process, commitments are used to decrease uncertainty, whereas in a causation process, networks are used to acquire resources according to the plan of implementation.

Principles	**Opportunity Formation**		**Influencing Factor**
	Effectuation	**Causation**	
1. Available means versus specific desired end	1.1a Opportunity formed based on a vague desire to start a firm	1.1b Opportunity formed with the desire to create one specific firm	Linked to: Motivation
	1.2a Opportunity formed with basis in controllable means (such as knowledge and network)	1.2b Opportunity based on that new means, not currently controlled, are acquired (for example through searching for information or through networks)	Linked to: Knowledge Network
	1.3a Opportunity formation includes change of goal and exploitation of contingencies	1.3b Opportunity formation follows a plan	Not linked
2.Control versus prediction	2.1a Opportunity formed based control and affordable loss	2.1b Opportunity formed based on predictions about expected returns	Linked to: Capital
3.Stakeholder commitment versus analysis	3.1a Opportunity formed based on commitment from stakeholders such as customers, suppliers and competitors which decreases uncertainty	3.1b Opportunity formed based on market analysis about customers and competitors	Linked to: Network

Table 1: Analytical Framework: Contrasting Effectuation and Causation and linking them to the Influencing Factors

In accordance with Kraaijenbrink (2010), the principles are not seen as being dependent on each other, meaning that an entrepreneur may apply processes from both effectuation and causation, both across and within each principle.

Table 1 guides the analysis in chapter five and forms the basis for determining if the opportunity formation process of the participants can be linked to effectuation or causation. How the processes are linked to the influencing factors is also shown in table 2 below, where each factor is linked to one or more of the parameters from table 1.

	Effectuation	**Causation**
Motivation	Motivation comes from a vague desire to start a firm (1.1a)	Motivation comes from a desire to start one specific firm (1.1b)
Knowledge	Currently controlled knowledge forms the basis for the opportunity formation process (1.2a)	The opportunity formation process includes search for new knowledge (1.2b)
Network	Network is used to form the actual opportunity (1.2a) and to create commitments from stakeholders which decrease uncertainty (3.1a)	Network is used to acquire needed resources (1.2b)
Capital	The investment for the opportunity formation process is based on affordable loss (2.1a)	The investment for the opportunity formation process is based on predictions about expected returns (2.1b)

Table 2: Linking the Processes and the Influencing Factor

Chapter 3. Methodology

This chapter presents the methodological considerations and choices that have been made to collect and analyse data in order to answer the research question. It contains reflections upon philosophy of science, the process by which this research has been carried out, a description and evaluation of the qualitative methods used for data collection, and finally an explanation of how the data has been analysed.

3.1 Dealing with Philosophy of Science

This section will provide an understanding of the philosophical assumptions underlying this dissertation.

Two aspects are important when dealing with philosophy of science, namely ontology and epistemology. Ontology concerns the nature of reality and the question of what can be said to exist (Easterby-Smith et al., 2008). Our view on reality will influence what we believe we can know about reality. Epistemology concerns our view on knowledge.

An ontological discussion concerns the question whether an objective truth exists, which is the job of the researcher to find, or if the reality only exists due to people's perception of it and thus is a social construct. The first stand derives from a positivistic view, where knowledge is about universal laws found by observing reality. The second originates from a social constructivist view, where knowledge is social and subjective (Easterby-Smith et al., 2008). Researchers seldom adhere strictly to the one or the other, which is also the case in this dissertation.

In accordance with Andersen (2003), I take a pragmatic view, where I assume that a physical reality exists independently of mine and others perception of it. However, a part of reality is social constructed, and may thus be described in different ways depending on who asks and who is asked and none of these descriptions are more real than others. Andersen (2003) classifies this view as a part of the critical realism perspective (Andersen 2003). According to Easterby-Smith et al. (2008), critical realism adds an interpretative thread to the purely realist ontology defined by Bhaskar, which assumes that, "the ultimate objects of scientific inquiry exist and act (for the most part) quite independently of scientists and their activity" (Bhaskar, 1989 cited in Easterby-Smith et al., 2008).

When dealing with my data, I thus recognize that events occur irrespective of whether they have been observed (Blundel, 2007). However, the answers I get from my participants are their perception of these events and the reality they live in. Further, the knowledge I acquire is influenced by it being me, as the researcher, who is acquiring it. All activities in the research process are done by the researcher; designing the research question, deciding upon relevant literature and methods, gathering data, analyzing it, etc. This involvement of the researcher may in all circumstances influence the research that is carried out; the researcher is also an "interpretative thread". Especially for qualitative research, the researcher interacts with reality when creating his or her data (Bryman & Bell, 2007), which is also what qualitative research has been criticized for, namely that the research is a product of the researchers preferences and thus replication is not possible (Bryman & Bell, 2007). This chapter seeks to strengthen the reliability of this research by providing documentation for how the research has been carried out.

Research that adheres to a critical realist approach often applies a process of retroduction (Blundel, 2007), which is also the process by which this dissertation has been developed. This is presented in the next section.

3.2 The Research Process: Retroduction

Retroduction combines deductive and inductive processes to overcome the pitfalls of purely deductive or inductive research. These are the notion within deduction that theories without facts are possible and the notion of induction that data can be decoupled from theory (Sæther, 1998). In a retroductive process the dynamic interaction between deduction and induction is important. According to Alvesson & Sköldberg (1994, cited in Sæther, 1998, p. 246), retroduction, "is suited to finding theoretical patterns, or deep structures, that if valid will help in conceptualizing the empirical and deductive patterns that are observed in a single case." The purpose of this dissertation is not to develop new theory, but to gain insights into the opportunity formation process of young Rwandan entrepreneurs, which will enhance our knowledge about the complexity of the processes embedded in this social phenomenon.

In practice, the retroductive process has occurred as a combination of deductive and inductive processes. The idea for writing this dissertation came from experience and observations within the field of entrepreneurship in Rwanda. The start of the process was therefore inductive, as I started with some few observations which guided the search for an appropriate theoretical framework. Then a deductive process began where current theories within the field were searched for. However, this process was facilitated by the beginning of the data collection and analysis; thereby starting an inductive process where the data helped forming the final research question and the appropriate theoretical and analytical frameworks.

In a retroductive process, multiple data sources are often drawn on (Blundel, 2007). This is also done in this dissertation, which applies a qualitative multiple method approach. This is presented in the next section.

3.3 The Qualitative Multiple Method Approach

The qualitative multiple method approach, described in this section, is inspired by an ethnographic design. According to Bruce (2007, p.119), ethnographic studies, “have the potential to uncover greater understanding of entrepreneurial behaviour, new insights into how entrepreneurial ventures emerge and grow, and explain the cultural and institutional factors that surround and either constrain or enable the emergence of a venture.” Denzin & Lincoln (1994, cited in Neergaard & Ulhøi, 2007, p. 5) define qualitative methods as methods that can capture a phenomenon through the meaning that people give to it. This is similar to phenomenology, which is about, “how individuals make sense of the world around them” (Bryman & Bell, 2007, p. 18).

Several researchers ask for more use of a qualitative approach to entrepreneurship, as it will allow researchers to go beyond mere description to explore and discover new sides of the field (Neergaard & Ulhøi, 2007; Gartner & Birley, 2002). As Gartner & Birley (2002, p. 1) also state, “many of the important questions in entrepreneurship can only be asked through qualitative methods and approaches.” Especially, the individual behaviour of the entrepreneur may best be understood by applying ethnographic or qualitative methods (Bruce, 2007). Understanding the behaviour of entrepreneurs is what this dissertation aims to accomplish. Further, a *multiple* qualitative methods is used as, “entrepreneurship is a too dynamic phenomenon to be captured by a single method” (Neergaard & Ulhøi, 2007, p. 4).

The backside of using qualitative methods is that generalisation is often not possible, thus the findings do not have external validity (Bryman & Bell, 2007). The participants in this study do not represent a sample and thus findings can not be generalized to a wider population (Bryman & Bell, 2007). Rather, as Bryman & Bell (2007, p. 424) state, “findings of qualitative research are to generalize to theory rather than to populations.” By combining and applying existing theories empirically, this dissertation may expand and develop the applied theories, which will ease the process for others who want to apply the same theories in other research settings.

As Flyvbjerg (1991) points out, knowledge is not only generated through generalisation, and may be extracted without formal generalisation. The purpose of this dissertation is not to quantify the findings, but to provide a unique understanding of the studied participants’ opportunity formations. The process that the participants of this study go through may be similar to other students or nascent entrepreneurs in Rwanda or in other developing countries, and this dissertation may thus provide a basis for future research and discussion within nascent entrepreneurship and entrepreneurship education, especially in developing countries and at university level. Learning for both practitioners and policy makers working with entrepreneurship, particularly entrepreneurship education and in developing countries, may be extracted.

3.3.1 The Participants: Students from School of Finance and Banking

The participants are selected based on their ability to provide information that will allow answering the research question. They are thereby purposefully selected (Patton, 1990 cited in Neergaard, 2007).

The participants are homogenous in the sense that they are all studying the same career, namely the Bachelor in Business Administration at School of Finance and Banking (SFB) in Kigali, the capital of Rwanda. The participants are a part of the relatively small percentage of the Rwandan population who attends university. In Rwanda only 5 % of the population at tertiary age attend tertiary education[1] (UNESCO Institute for Statistics, 2008a), as opposed to 77 % in Denmark (UNESCO Institute for Statistics, 2008b). The fact that they have had the resources to attend university may be a sign of them being a part of Rwanda’s middle or upper class and therefore they have more opportunities in their life compared to the general Rwandan population, which may influence the way they start up their businesses. This is important to keep in mind as the

[1] Tertiary education includes both long and medium post-secondary education such as masters, bachelors and vocational training.

results may prove different than if the study was done with entrepreneurs from rural Rwanda without education. Further, the fact that they are actually business students may change the way they talk about business as they may know the theoretical terms and best practices.

The students were found using a combination of reference-based and snow-ball selection. This is a common practice, as references can help to start the snow-ball (Neergaard, 2007), which was also what happened to me. My first contact to SFB was with two lecturers, who identified relevant students. I started interviewing students, who would then direct me to other students.

First, I imagined including both students who only had the idea of a business and students who had already started a business. But as I did my first interviews, I found that the students who only had the idea of a business could not give me useful information in order to answer my research question. As my focus is on opportunity formation which includes more than only the idea of a business, according to Dimov, (2007, p. 7), “ideas are necessary but not sufficient condition for opportunities to emerge,” and as opportunity formation, and entrepreneurship in general, involves actual actions taken, I decided to limit my participants to the students who either have businesses or are in the process of starting up a business. Whether the participant was in the process of starting or had been running the business for a while, my focus would be on the start-up phase of the business, where my participants were nascent entrepreneurs meaning that the activities they did would eventually lead to firm creation (Aldrich & Martinez, 2001). I have been aware that students who started up their business several years ago might not remember how and why they started up their business.

In the beginning it was easy to find people who were willing to participate in my study. However, after the first seven interviews it became harder, which might be due to the fact that SFB was going into the period of exams, which made students very busy and to contact them became difficult. I ended up with eight participants, which I found to be enough to answer my research question. I attempted to get the same proportion of girls in my study as at SFB. The proportion of girls at SFB is approximately 35 % (information from the Director of Academic Services at SFB) and I reached 25 % as two out of eight are girls. Three of the participants are in the very beginning of the entrepreneurial process of starting their business, four are already operating and have been doing so for between five month and seven years, and one has started and closed a business. Except for one who is in his thirties, they are all in their early twenties.

Table 3 below gives a short presentation of the eight participants; their name, business opportunity and status. Short descriptions of each participant are also given in appendix 1.

Name	**Business Opportunity**	**Business Status**
Thadeo	Clothes importing	Preparing; accumulating money and gathering information
Steven	Cleaning company	Operating; been in business for four years
Joel	Website	Preparing; building the website and finding sponsors
Philbert	Graphic Design	Operating; been in business for five years
James	Clothes importing/Shop selling airtime	Preparing; getting ideas and finding investment
Celestin	Cleaning company	Operating; been in business for seven years
Louise	Photocopying shop	Operating; been in business for 5 months
Peace	Milk shop	Closed; business operated for one year and closed April 2011

Table 3: The Name, Business Opportunity and Status of each Participant

The next section presents the data and how it was collected.

3.3.2 The Data and its Collection

Since I have been living in Rwanda for 1½ years, I have gained some informal knowledge about the context. This was an advantage in my data collection process. Often the students would mention country specific issues, such as history, events, persons and businesses that I would know and which made it easier for me to understand the participants, and also created a larger trust between me and the participants as they saw me as being committed to Rwanda and not just as a person passing by.

Being a student myself, has also helped me in the field because it has decreased the imbalance between me and the participants and allowed me to come close to them and thereby get more honest and valid answers (Bruce, 2007). I have for example been sitting chatting with some of them after the interviews or when collecting the diaries, and I have also been meeting some of them for social purposes. However, some of them have also seen me as a good connection. The fact that I am a foreigner makes me interesting for finding financial means and doing marketing for products and services. I also experienced being asked for help with finding suitable masters programmes in Europe. This might be seen as an advantage, as the students are more willing to meet with me because I might be able also to help them. However, it is important to be aware of, as the way they present themselves and their ideas and businesses might be influenced by that. For example they might focus on the values and services of their businesses and try to make their business look perfect and without any mistakes. Further, they might be reluctant to tell me the challenges they have faced, or the ways they came around obstacles in the beginning, for example by operating without being registered or by using family and friends as their first customers.

The data was collected over a period of three and a half months; one month of preparation and getting contacts and two and a half months of interviewing, diary writing and observations. This relatively long data collection period, allowed me to overlap the collection with both the analysis and theorizing and made it possible for me to be flexible in my data collection and make adjustments. For example, as mentioned, after doing the first interviews, I found that the interesting stories came from students who either have businesses or are in the initial state of starting up a business.

The methods I have used to collect the primary data are:

- Semi-structured interviews with each participant
- Written diaries from some of the participants
- Observation of class room teaching
- Informal talks with some of the participants

Interviews

The first contact with the students was during the interviews. Semi-structured interviews allow capturing meaning and life-stories (Bruce, 2007). During the interview my main focus was to get the story of the participant's business; from the initial desire to start a business to the actual creation of one. The purpose being to understand how and why the business was, or is being, created.

Most of the interviews were done at the campus of SFB. SFB has extensive grounds with benches where the interviews could take place with little disturbance. Further, as my participants spend a lot of their time at SFB, it seemed the most suitable place to meet them, as they feel comfortable, and to minimize time spent on transportation. I recorded all the interviews, except for the last part of one of them, due to failure of the recorder. The interviews lasted for between 31 and 55 minutes, the average being 43 minutes and can be found on the enclosed CD-ROM.

The interview guide, enclosed in appendix 2, has been developed with inspiration from Bruce (2007). As the interviews are semi-structured, the interview guide is meant only as a security for me to make sure I get all the answers that I need. The structure of the questions varies in each interview and so does the way the questions are asked.

Before each interview I did a briefing (Kvale, 1994), presenting myself and the purpose of the interview, however, without saying too much about the topic of the study. The first question I asked was about the background of the participant. This was done to get the participant started and creating a nice atmosphere, what Kvale (1994) calls dynamic questions. However, the answers to the background questions sometimes became thematic, meaning that they gave me the insight that I was looking for. Giving the participants an opportunity to start talking about what they found to be important, I often experienced that they would simply keep talking, giving me their entire business story based on that single question. After the interview I also did a debriefing, where I asked if the interviewee had anything to add or questions to ask me.

I intentionally did not use words such as opportunity, effectuation or causation in the interviews. The reason for this being not to direct the participants to think about their business in a specific way, and further not to use words that might for them have another meaning than for me as a researcher. This is important to be aware of because, "the language we use to explore and understand the events we observe will shape what we can actually find out" (Gartner et al., 2003, p. 122). Instead I asked more general questions such as, "how did you get the idea for your business?" or simply looking for steps taken by asking, "what did you do next?" Another tactic I used was simply being silent. This would often lead the participant to continue talking after a while. In combination with the interviews I also got the chance to visit three of my participants businesses, which enhanced my understanding of what they are doing (Kvale, 1994).

Diaries

After the interview I presented the diary, introducing it as a tool that might also help the participants in their process of starting up a business. All participants agreed to bring it home. The participants were asked to write down, approximately twice a week for a period of six weeks, their thoughts and actions in connection to their business. The diary template is enclosed in appendix 3, and the diaries written by the participants are enclosed on the CD-ROM. The diary notes allow me to, “come very close to an entrepreneurial process and obtain access to thoughts, feelings and reflections” (Brundin, 2007, p. 291). They allow me to answer my research question, as it is the process of opportunity formation I want to explore, which is best done by being able to follow the students for a period instead of only getting their thoughts at one point in time during interviews. Further, diary notes secure that thoughts and actions are reflected upon almost immediately; it is a real-time method because it captures data on the time it takes place (Brundin, 2007). Further, as Davidsson & Wiklund (2001, p. 90) write, “real-time studies are valuable because retrospective approaches are likely to be flawed by memory decay, hindsight bias, and rationalization after the fact.”

There are also disadvantages with the method. For example, the reflections might have an impact on future actions, meaning that I, as a researcher, actually influence the process and that the opportunity formation process thereby would have been different in my absence. However, the advantages seem to outweigh disadvantages (Brundin, 2007), and the fact that my interaction with the students might facilitate them in their desire to start up their businesses can also be seen as an advantage, as it creates a give and take relationship, thereby turning my research method into action research.

A challenge I met in connection to the diary method, was that the participants were busy and not all had time to use the diary, and I got just three diaries back. Fortunately, the diaries I got back were from participants who were in the early start-up process, thereby making their responses very useful. When meeting the participants to get back the diaries, I had informal conversations with some of them about both their experience with writing the diary and the progress of their businesses. They all expressed that writing the diaries was a good experience and some asked for an empty one to be able to continue.

Observations

The students were all, or had been, taking a mandatory course in entrepreneurship as a part of their education. I have followed this course with the underlying assumption that, among the courses that the students follow, it is the one that influences their knowledge regarding their opportunity formation process the most. Further, it has given me an insight into the context in which these students operate. The course is given one time per week for two hours. I participated in the class four times during the last month of the semester. Each time I took notes about my observations regarding the general atmosphere in the room, teaching method & themes and the behaviour of the students.

I have also done interviews with two lecturers from SFB. The first was done with the lecturer who is giving the entrepreneurship course, and the second with the lecturer in charge of the Bachelor in Business Administration part time programme. The purpose of the interviews was, besides getting access to students, to get information about the relevance of the entrepreneurship course in connection to the opportunity formation process of the students. None of these interviews were recorded, but notes were taken. Another secondary data source for the same purpose is the entrepreneurship course outline. This is enclosed on the CD-ROM. As secondary data corresponding to the specific context, I have also made use of data from reports about Rwanda and the website of SFB. Table 4 below gives an overview of the data.

Primary Data	**Secondary Data**
Interviews with eight students Diaries written by three students Informal talk with a couple of students Interviews with two lecturers at SFB Observations of four teaching sessions of the entrepreneurship course at SFB	Entrepreneurship Course Outline SFB Website Reports from the IFC, IMF, World Bank and the Government of Rwanda

Table 4: Primary and Secondary Data

The next section explains how the data has been analysed.

3.4 Data Analysis

During the whole data collection process I have taken field notes, e.g. right after an interview or during class participation. These field notes were a combination of description and analysis. Reflecting upon the interviews right after they finished helped me to integrate more than just the spoken word in my analysis, as I would write down thoughts and observations that would make it easier to recall the holistic experience of the interview, such as body language and appearance.

As a part of the process of analyzing the interviews, I listened to them and transcribed the parts that I found to be relevant for my research. I got a total of 36 pages of transcribed interviews. These transcriptions helped me getting to know the data and becoming familiar with the interviews and also to search for words and passages of the interviews during my analysis.

I started analyzing each student individually on two different parameters. The first parameter being the influence of the four factors motivation, knowledge, capital and network on the opportunity formation process, the second, how each participant's opportunity formation could be related to effectuation and causation according to table 1 presented in section 2.5 on analytical framework. I then combined all the participants into two different analyses corresponding to the two parameters and then, incorporated the first analysis in the analysis of the processes. This was done in accordance with how the influencing factors are linked to the two processes presented in the analytical framework in section 2.5.

The opportunity formation process is influenced by the context where it takes place (Davidsson et al., 2001). This is taken into account by incorporating characteristics of the context in the analysis. The specific context for this study is presented in the next chapter.

Chapter 4. Context

In defining entrepreneurship and the entrepreneur it is important to remember that entrepreneurs do not work in a vacuum (Hindle, 2004). The environment that the entrepreneurs operate in will influence how they develop (Shane & Venkataraman, 2000) and therefore, the characteristics and behaviour of entrepreneurs as well as the entrepreneurial process, including opportunity formation, should not be treated isolated, but as a part of a wider context (Jack & Andersson, 2002; Van De Ven cited in Ucbasaran et al., 2001; Davidsson et al., 2001). Yet, Jack & Andersson (2002) state that locating the entrepreneur within the structures of society is difficult.

The fact that this study takes place in a developing country might make it even more vital to examine the context as it is different from where research within entrepreneurship is normally carried out and, as Johns (2006, p. 389) suggests, the difference in context is often the reason to variations in studies because, “context will often vary more than individual differences across research sites.”

But what is context? Context may capture almost everything and it is therefore important to give thought to what context contains in a specific research. Mowday & Sutton (1993 cited in Johns, 2006, p.386) define context as, “stimuli and phenomena that surround and thus exist in the environment external to the individual, most often at a different level of analysis.” The context is often perceived as a higher level of analysis that impacts the lower level (Johns, 2006). This definition is used when deciding the context factors of this dissertation, which focuses on the individual level of analysis, namely the entrepreneur.

Johns (2006) suggests that the general context consists of the dimensions who, where, when and why? Using these dimensions, the context of this study is business students at a university in Kigali, Rwanda studied in the spring 2011 in order to find out how they form opportunities. The “why” have been accounted for in the introduction and the “who” was described in the methodology chapter. This section will therefore mainly include the context dimension “where”, which in this dissertation is a developing country; Rwanda, at a business university; SFB.

4.1 Rwanda

Rwanda is in the group of least developed countries on the OECD DAC list (OECD, 2009). The war which ended in 1994 with the genocide against the ethnic group Tutsis, left Rwanda with no infrastructure and a ruined economy with limited ability to attract foreign investments (CIA, 2011). Rwanda has come far in its recovery and has had an average annual growth rate of 7-8% since 2003 (CIA, 2011). However, the country is still one of the poorest countries in the world, and in 2000 64% of the population was living below the poverty line (Murenzi & Hughes, 2006). The country has a population of approximately 11 million and an area of 26,338 square km, which makes it the most densely populated country in Africa. It is landlocked and bordered by Congo, Burundi, Kenya, Uganda and Tanzania, the last three, together with Rwanda, forming the East African Community (CIA, 2011). See figure 4 and 5 below.

Figure 4: Rwanda's location in Eastern Africa

Figure 5: Map of Rwanda

The main foreign exchange earner is tourism and the most exported products are tea, coffee and minerals. Rwanda's economy is currently based on agriculture, which employs more than 90 % of the population (CIA, 2011). With a fast growing population and a relatively small country, this means that in the future farming families will not be able to possess enough land to make a living unless productivity increases (Republic of Rwanda, 2000). Further, youth make up the majority of the Rwandan population; around 73% of the population is under 30 years old (NISR, 2010). This is a challenge to unemployment and might make self-employment an available solution.

Rwanda's vision, as stated in the Rwanda Vision2020 plan, is to turn the country into a middle income country by 2020. This means increasing the annual per capita income from $458 USD (in

2008, UN statistics) to $900 USD, which requires a high growth rate (Republic of Rwanda, 2000).

The business sector in Rwanda is, as in most developing countries, characterized by many small firms. There are approximately 70,000 micro and small scale enterprises with less than 10 employees. These are both formal and informal and they are employing around 300,000 people (World Bank, 2007). The medium sized sector, employing between 10 and 100, consist of approximately 200 enterprises and large corporations, employing more than 100, are under 50 (World Bank, 2007). The total number of registered businesses in 2009 was around 34,000 (NISR, 2010). This might indicate that many people start a business, but few register them. Comparatively, Denmark has around 300,000 registered businesses and approximately half the amount of citizens as Rwanda (Erhvervs- og Selskabsstyrelsen, 2007).

The Rwandan economy and trade is challenged by the long distances to ports and railway networks which inhibit industrial development (Republic of Rwanda, 2000). A survey done by the International Finance Corporation among a variety of formal businesses in Rwanda shows that the main challenges for businesses are transportation, such as getting raw materials to the country, costs and availability of land, taxes, access to finance and electricity. Access to finance is a greater challenge to micro enterprises (below 3 persons) than to bigger firms (OTF Group, 2009). A World Bank report from 2007 comes to some of the same conclusion, namely that infrastructure in terms of for example electricity and transport as well as access to finance, especially for small enterprises, are constraints for Rwandan firms.

Facilitating private sector development and entrepreneurship is on the agenda of the Rwandan government (OTF Group, 2009). Both Vision2020 and the Economic Development and Poverty Reduction Strategy put focus on private sector development (IMF, 2008). This is also seen by the progress in the institutional environment for businesses. The improvements show in the World Banks Doing Business Report 2011, which measures the ability to do business across countries on different parameters. The parameter where Rwanda has made most progress is “starting a business.” This parameter measures how easy it is for businesses to start operating legally, such as the required time and cost of getting all the necessary permits and licenses. Rwanda has moved from number 64 in 2009 to number 9 in 2011. It now takes only 3 days to start business compared to 14 days in 2009. Further, the cost of starting up a business has decreased from 110% of per capita income to approximately 10% (World Bank, 2011a). This puts Rwanda in front of the average of Sub-Saharan countries and almost reaching the average of OECD countries.

On the parameter, “getting credit” which measures the scope, quality and accessibility of credit information and the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders, Rwanda is ranked as number 32, moving from 147 in 2009. In some indicators for this parameter, for example in legal rights, Rwanda is doing better than both the Sub-Saharan and the OECD average. However, on others, such as registration of information about borrowing history of individual and firms, Rwanda is still behind other Sub-Saharan countries (World Bank, 2011a).

Even though, the business climate in Rwanda has improved, and it may have become easier to start up a business improvements are still needed (OTF Group, 2009).

Data from the World Banks “Project on Governance”, measured the quality of institution on six “Worldwide Governance Indicators” across 212 countries from 1996-2009 (World Bank, 2011b). These indicators show that Rwanda has increased its control of corruption, political stability, government effectiveness, regulatory quality, and rule of law during the period. However, the country is still far from the level of a Western country like Denmark (World Bank 2011b). As conflicts influence the institutional framework (Naudé, 2010), the weak institutional framework in Rwanda is most likely an outcome of the recent war in 1994.

4.2 School of Finance and Banking

School of Finance and Banking is a public institution offering a Bachelor’s and a Master’s programme within business and management (SFB, Welcome, 2011). It was established in 2002 to promote welfare among Rwandan citizens (SFB, Background, 2011) and started operating in 2004. The Bachelor in Business Administration programme has been running since 2006. Currently 2762 students are enrolled at SFB, and 949 students have graduated from the programme (SFB, Background, 2011). SFB has a mission to provide education that enables the entrepreneurial development of its students and, “to inculcate an entrepreneurial spirit in the student population” (SFB, Vision and Mission, 2011).

In 3rd year of the Bachelor in Business Administration an entrepreneurship course is offered to all students. According to the curriculum, it accounts for approximately 2.5 % of the total curriculum. The objective of the course is to encourage the students to become entrepreneurs and it provides, according to the course outline, the necessary skills and knowledge to become an entrepreneur including alertness to recognize an opportunity and develop it into a business plan. It also creates awareness of the environment that entrepreneurs operate in.

The next chapter will take this context into consideration, when analysing the opportunity formation process of the Rwandan students.

Chapter 5. Analysis of the Opportunity Formation Process

In this chapter the opportunity formation process of the participants is analysed. The analysis follows the structure in table 1 presented in chapter two, section 2.5 on analytical framework. The three principles that contrast effectuation and causation work as headlines. In order to determine how the two processes have been applied by the participants, the data is analysed according to the way opportunities are formed in causation and effectuation respectively. A summary of the analysis is given at the end of the chapter.

5.1 Principle 1: Available Means versus a Specific Desired End

The purpose of this section is to determine whether the opportunity formations process of the participants in this study is done based on available means, as in effectuation, or a specific desired end, as in causation. This is done by analysing the opportunity formation processes of the participants on the three parameters presented in table 1 in section 2.5 on analytical framework.

5.1.1 Vague Desire or Specific Firm

The first parameter considers if the opportunity is formed based on a vague desire to start a firm or on the desire to create one specific firm. This is linked to the motivation factor, as aspirations for the future may influence whether an opportunity is formed based on a broad desire to create any firm, or if it is formed based on the idea to create a specific firm. First the motivations of the participants will be presented.

The participants in this study mostly expressed that their motivation for starting a business was the idea of becoming independent and ones own boss; 6 out of 8 explicitly expressed this desire. Thadeo got this motivation from experiencing working for others. He did not like that, “someone was controlling my activities” and that, “someone calling me that you are late you were supposed to do this and this” (7:30). He wants to manage his own time and do his own activities at his own preference (7:48). Similarly, Steven expressed:

> “After I finished my secondary school it was my inspiration to start up something new, and to feel independent from working for other people, and also I wanted to run away from the stresses and restrictions that are put by other people who are managing you” (2:48).

The same goes for Joel who said, “I wanted just to be the owner of my enterprise, I wanted freedom” (7:35) and for James who stated, “I wanted also to be independent, not always be coming please give me this please give me this, I want self-sustainability” (6:19).

Motivation for starting a business may be different in developing countries because external factors such as unemployment push people into entrepreneurship. However, in this study, the main motivation for starting a business was to gain independence, which is determined as a pull factor. This finding may be due to the fact that the participants in this study belong to the high social class in Rwanda.

Other mentioned motivations such as family obligations, unemployment and security for the future may be more linked to the context of a developing country. For example, Louise wants to grow her business to prepare for her future, which may also be a sign of wanting financial security. This might be connected to the lack of social security in a developing country like Rwanda, such as unemployment benefits from the government. The lack of social security systems can also be connected to Peace’s motivation for starting a business, which was to help her sister, who did not get the opportunity to continue studying and therefore had nothing to do (00:30). This may also be a sign of the obligations that exists within the family when government support to unemployed is limited. Steven also mentioned that he was motivated to start a business due to his experience with how difficult it was for him to find a job after secondary school (2:48). That is also what gives him his motivation to study and do business at the same time, as he said:

> “What makes me going is the reality of life, when I see people who are graduates already, and they are on the roads every day carrying envelopes that they are going to look for job, I really get motivated of what I am doing, I will never go on the street carrying an envelop” (25:00).

The only one, who expressed that he got motivation from being able to use his knowledge and due to an identified market need, was Joel, as he expressed:

> “That is the spirit of innovation which also keeps me going; you have to innovate something new, to create something new which are needed on the market” (32:48).

Joel was also motivated by financial gains, as he expressed, “it is the hope that one day I will be a millionaire” (31:20). The same goes for Philbert who needed to make money in order to continue to study (28:38).

The participant’s motivations for starting their own business show that they do not go into business because they have identified a specific opportunity that they want to exploit. Rather, as the definition of an effectuator suggests, they have dreams about their future and that is what has started the process of opportunity formation. Most of them had the desire to start a business before they knew which business to start, which shows that what guides them in their process is in line with effectuation as they were not guided by one specific end-goal. Joel for example started with the idea of wanting to build a website because that was what he was able to do, and then slowly he found out what it should contain, as he said, “actually I had an idea of building website […], but I was like, what am I going to put on that website (09:30)”.

One reason for their motivation being more linked to effectuation may be that half of the participants come from a family of entrepreneurs, which has given them motivation to start businesses themselves. As Thadeo stated:

> “Actually I have grown up to see most of my family members, cousins, brothers, uncles, most of them are entrepreneurs, they have started their own businesses and I have seen them grow” (36:40).

Joel also gets his belief in business from his family, as he said, “my parents used to encourage me […] make your own businesses don’t wait for us to give you the employment” (43:46). The idea for starting a business has been with the participants since their childhood, but the exact opportunity has been identified later.

This also illustrates that there is a link between motivation and network. Family is a part of a network which provides motivation. Motivation may thus come from network.

5.1.2 Controllable or New Means

The second parameter, that helps determining whether an opportunity is formed based on available means or a specific desired end, concerns whether the opportunity is formed with basis in controllable means such as knowledge and network or if it is based on that new means, not currently controlled, are acquired, for example through searching for information or through networks. This question is linked to two of the factors; knowledge, for determining whether existing knowledge is what forms the opportunity or if new knowledge is needed, and network, to determine whether the network is used to shape the opportunity or to acquire resources for a predefined opportunity.

Knowledge

A way to gain knowledge about opportunities is searching for them. This process is a part of the causation school. None of the participants expressed that they have acquired knowledge by making a comprehensive opportunity search before entering a market. As this requires a certain amount of resources, this might be linked to the context, as limited resources is often a fact for nascent entrepreneurs (Breslin, 2008b; Aldrich & Martinez, 2001) and maybe even more when they are operating in a developing country, where information about markets and opportunities is often limited due to institutional failure. Therefore, searching might not be worthwhile and knowledge and information may come from other informal channels. As suggested by Shane (2000), what nascent entrepreneurs build their firms on may also be knowledge they already posses. This also seems to be the reality for the participants in this study who all expressed an influence of knowledge in their opportunity formation.

Knowledge that influences the opportunity formation may come from former jobs. That was the case for Celestin and Philbert who started their firms based on their prior experience from working in their respective fields. By having had jobs in the same field that they would go on to start their own businesses in, they had developed the needed skills and market knowledge for starting their own businesses. As Celestin expressed:

> "I was buying materials, writing the tender books, bidding, winning the tenders, supervising the work, making work schedule, everything was done by me. So I thought; what I am doing for my employers, can also be done by me" (10:35).

Thadeo also formed his opportunity based on knowledge gained from his experience with importing, as it made him realize that he might be able to do that himself, as he said:

> "When I did that I asked myself: Why can't I go, buy my own things and then bring them to Rwanda, sell them to wholesalers, not retailers, wholesalers, cause they already need them" (10:56).

Knowledge influencing the opportunity formation may be about markets. Celestin had knowledge about the market, which decreased uncertainty for him as he knew customers were out there (11:51). Thadeo and James had also gained market knowledge from growing up outside of Rwanda. This was mostly in terms of importing cheap goods. As James said:

> "Because I have lived in Kampala, I have lived in Dar Es Salaam, Tanzania, therefore I know what prices that favours" (22:33).

James thereby took a starting point in his knowledge as he wanted to import due to his knowledge about prices in Dar Es Salaam. The logic was, "I know someone in Dar, let me start importing" corresponding to an effectuation process, not as causation would suggest, "I want to import, what do I need?" However, this idea of James was not fully built on his controlled means. At the time of the interview he had a plan to get money from his sister to start his clothing shop, but the diary showed that this did not work out and he had to change it to a business where his available means would fit better. He now wants to start an airtime shop at Kigali Institute of Management (diary 7.4). According to James, the new business requires less time, fewer financial resources and the network he has at the school will also help him (conversation, 13.5). As in effectuation it seems that this new opportunity fits better with his controllable means. However, taking a causation approach one could also argue that it might have helped James in his opportunity formation had he done some analyses and planning.

Thadeo also had some knowledge about the market, as he expressed:

> "At least I have some knowledge about the market [...] I know there are places in Kigali or in Rwanda where actually they need these things" (13:55).

That knowledge combined with the importing experience helped him forming his opportunity. Joel also formed his opportunity based on, among other things, his knowledge about the market. He found that the market for housing was very inefficient due to the high transaction costs such as time and fees of using commissionaires. By creating a website to connect home owners and home renters he wanted to make the market more effective (10:06-11:25). The idea for the tourist portion of his website came from him having knowledge about the market from being a customer in the market having trouble finding a hotel (25:53). However, the most influential factor in terms of knowledge for Joel's opportunity formation seems to be his technical knowledge within computer science that he had acquired from Kigali Institute of Science and Technology (KIST) combined with his business knowledge from SFB, as he said:

> "I was thinking, what can I do to combine the knowledge I got from KIST and the knowledge I get here in the business, so that they can work together to produce something? Then I came up with the idea of creating a website" (5:55).

This shows that Joel first of all thought about his knowledge within IT and business, and then came up with the opportunity of building a website. This corresponds to an effectuation process, where the opportunity is identified according to controllable knowledge.

Knowledge may also come from education. All participants in this study were following a Bachelor in Business Administration, thus they have knowledge from business education, which may influence their opportunity formation process. In this regard, it is important to keep in mind that three of the participants, Celestin, Steven and Philbert, started their businesses before entering SFB, which means that SFB did not have a chance to influence their initial opportunity formation processes. Further, determining the impact of education is difficult both for the researcher, but also for the actual student, as it may be difficult to determine which learning derives from education. Learning happens at many levels and is a broad field, which lies outside the scope of this dissertation. The following presents and analyses how the participants express their own learning. Further, based on observations, interview with the entrepreneurship lecturer and the course outline, the Bachelor in Business Administration, particularly the entrepreneurship course, which is assumed to be the most relevant for the initial opportunity formation process, is analyzed.

Studying at SFB is a source of knowledge, as Thadeo stated, "what it [SFB] has done is equipping me with knowledge" (33:44). Joel and Thadeo mentioned the marketing course as something that has helped them in their process. Thadeo has mostly used it for communication, as he said:

> "I know how to work with other people, actually I know how to communicate, do the business communication […] the marketing part of it [...] I have learned from school" (31:48).

Joel also mentioned marketing as the most important learning from SFB as it has helped him to measure responsiveness from the market (42:41). James stated that the business law course has taught him the legal aspect of doing business, for example about contracts and regulations (23:11). According to Peace, studying has helped her, "to provide what customers need, negotiate about prices, and set prices that they can achieve and it can't make me loose" (15:13). She also expressed that she has used knowledge from accounting for calculating loses or gains. Thadeo said that studying at SFB has taught him how to manage his business, because as he said, "I don't want to depend on anybody" (30:10). He wants to manage his own business and do that professionally. This is also expressed by Philbert and Celestin who said that they have gained knowledge and skills from SFB to manage their businesses professionally and make sure that it can sustain them.

All these statements indicate that most of the knowledge that the participants have gained from SFB is mainly within management and not particular for the start-up process. This is also what Davidsson and Honig (2003) have found, namely that business education often becomes relevant in the later exploitation phase. This also corresponds with what the entrepreneurship lecturer expresses and what observations from the class indicate. This will be presented and analysed below.

The objective of SFB is to enable the students to become entrepreneurs (SFB, Vision and Mission, 2011). According to the entrepreneurship course outline, this is also the objective of that course. However, the entrepreneurship lecturer stated that it is not easy to achieve that objective in the current setting. According to him, the school may play a role for students who want to become entrepreneurs, but they need something more. This is also what observations from the teaching showed. The class consisted of approximately 300 students in an auditorium where the acoustics made it difficult both to hear what the lecturer was saying, as well as to concentrate, due to other sounds in the room that were distracting. The entrepreneurship lecturer tried to make the teaching practical by giving assignments and using case studies. Observations from the course showed that he uses interactive teaching by asking many questions to the class.

However, with 300 students and the acoustics in the auditorium, answers were hard to follow. The lecturer pointed to the lack of resources as a barrier for enabling students to become entrepreneurs; the support to students apart from teaching at SFB is very limited. He does receive some students at his office, to whom he gives business advice, but otherwise no support for nascent entrepreneurs is given at SFB.

According to the entrepreneurship course outline, the course seems to be built on causation logic, which is also the common approach in most business schools (Brinckmann et al., 2010; Chandler et al., 2011). The course is built on the approach that students have to be alert to recognize an opportunity, then do a feasibility analysis and write a business plan. Observations from the class indicated that the teaching focuses more on business management for already established businesses, than on start-up activity. The observed courses focused on how to sustain and expand an already existing business. For example, in a class on opportunity identification, a case study on an already existing firm importing a product which was banned by the government was presented. The task was to determine whether that represented an opportunity and what the manager should do. Another example is a class about growth strategies such as mergers & acquisitions, joint ventures, licensing and exporting, which are often related to already established firms. These observations fit with the common teaching approach in Africa, namely that entrepreneurship education in Africa often is mixed with small business management (Co and Mitchell 2006; Kabongo and Okpara 2009).

It seems that the participants have gained more than academic knowledge from classes by participating in the Bachelor in Business Administration at SFB. The fact that they are students at SFB seems to have influenced their opportunity formation process indirectly by giving them a broader network and knowledge about the market for students. Several of the students who have started their businesses while studying have chosen students as their target customers. James for example wants to start a clothing shop for students, because he believes they can pay for it, and he knows what they like (16:56). Louise also formed her opportunity based on her knowledge about the market and the customers from being a student. She started a photocopying shop because she experienced a need herself and knew that students shared the same need for cheap copying of notes and books, as she said:

> "Last year I missed the money for making photocopy, and I think there is some students who have that questions like me" (12:02).

She knew she would be able to do it cheaper than the shops available at the university because she would buy a photocopying machine that can print two pages on one, resulting in a price reduction of 50 % (10:25). Being a student herself also helps her because she knows where to get the notes from and that students need to copy notes during the periods of exams. The same goes for Peace who knew from her own experience that students at SFB were lacking a place to buy milk close to the university. Therefore she saw an opportunity in selling milk to students (25:50). This shows that SFB does not only provide the students with academic knowledge, but also with a network in terms of customers for their businesses and knowledge about the market for students. This shows that factors such as knowledge and network are connected.

In general it seems that the participants in this study succeed in taking advantage of the knowledge they have and let that be a part of guiding their opportunity formation process. This might be because knowledge is their main resource, as everything else is often limited for nascent entrepreneurs and may be even more limited for nascent entrepreneurs in a developing country.

Taking a starting point in the knowledge one possesses is a sign of effectuation. However, as Chandler et al. (2011) point out, focus on existing resources may also be a part of a causation process and it can therefore be difficult to separate the two processes. It is for example difficult to determine whether the knowledge about markets that Joel and Thadeo expressed is gained in order to exploit a specific opportunity in that market, which would be a causation process or if they had that knowledge before they decided upon their opportunity which would then be connected to an effectuation process. Yet, in general it seems that current knowledge plays an important role in the opportunity formation process from the beginning, which shows that the participants do effectuation.

Network

Almost all the participants have done some kind of network activity in regard to their opportunity formation. Many nascent entrepreneurs lack resources, which they can get access to through their network. Further, as networks in developing countries may be broader, access to resources through networks may also be easier. These resources could be information, customers, skills, investment or the actual opportunity.

In this analysis, resources acquired for a specific opportunity through a network are linked to a causation process, whereas resources gained from a network that helps shaping the actual opportunity is linked to a process of effectuation. However, it may be difficult to distinguish what comes first: the resources or the opportunity. Thadeos contact with customers can for example be seen as both effectuation and causation. He said, “I want to start importing for wholesalers […] because I already have contacts” (9:10), thereby working through effectuation because his contacts helped him define his opportunity, as he knew customers who might be willing to buy his products. However, when he said, “it [his business] has to evolve around my contacts; I will have to meet these business people, tell them I have these goods,” (32:14) it shows sign of causation, because he does not have the contacts yet, but will have to go out and acquire them according to the opportunity he has identified.

The participants financed parts of their opportunity formation through their networks. This is typical in both developing countries and for nascent entrepreneurs in general (Kim et al, 2006; Naudé & Havenga, 2005; Spring & McDade, 1998; Khavul et al., 2009). Joel’s mother helped him with funds for paying hosting fees (20:21). Currently, James is trying to get his sister to invest in his business (18:30). Louise got some of the capital for starting her business from her boyfriend (5:06). Peace started her business with capital from a family member (3:17). Celestin got capital from his brother, which allowed him to buy uniforms for his first employees (18:08). In these cases it is also not easy to determine whether the opportunity formation was based on the size of the investment, as effectuation would suggest or if the investment was acquired according to the opportunity as in causation. When James asks his sister for a specific amount it may be causation, contrary Louise decided her opportunity based on the capital she had at hand, which is effectuation. The fact that capital accumulation takes place through family and friends shows that the factors capital and network are linked.

Thadeo’s acquired experience with importing through his network can be connected to a process of effectuation. The experience made him realize that he could form his opportunity around importing which is a sign of effectuation as it was due to the actual experience that he decided to import. Joel got technical skills for building his website through his network as he knows the people behind the Rwandan website www.igihe.com. He said, “those guys helped me a lot in building my website” (15:35). This may show a sign of causation as he acquired needed skills from his network, but it may also be that he decided building his website because he knew he could get that help. It is therefore not easy to determine whether it can be linked to causation or effectuation.

Joel has obtained access to customers through his network. The people behind www.igehe.com helped him with contacts to possible customers and radio presenters so he could advertise his website (15:19; 15:35). Thereby he has been able to do an interview for a radio station (diary, 3.4). He has also networked extensively with customers. During the one and a half month he wrote in his diary, he had been in contact with five companies that might give him money through advertisement of their activities (diary, 24.3; 27.3; 3.4; 1.5). He has also partnered with the National Commission for the Fight against Genocide, which has helped him getting on TV (diary, 1.4). It seems that Joel mostly used his network to acquire resources for his defined opportunity, but it is not easy to determine how much these networking activities have influenced the actual opportunity formation process and the link to either effectuation or causation is therefore ambiguous. This shows that opportunity formation is a non-sequential process and that most decisions and actions are interlinked. Further it shows that the line between causation and effectuation is blurred, and determining whether actions belong to one or the other is in some cases difficult.

Thadeo expressed that he does not only network in connection to the business he is currently trying to start. He attends different events where he sees a possibility for networking. The contacts he gets are not necessarily based on the business he wants to start; rather he tries to get all kinds of contacts, as he said:

> “When I do networking, I do not necessarily look for who is doing this, I just get whoever I can, you never know sometime I might need them” (17:28).

Rather than looking for people who can help him in his already decided business, he is open to an effectuation process, where the people he meet will help him shape his business.

5.1.3 Change of Goal or Following a Plan

A third parameter for determining whether an opportunity is formed with a basis in available means or due to a specific desired end, is to look into whether the opportunity formation includes a change of goal and exploitation of contingencies, or whether it follows a plan. This parameter has not been linked to any factor in the analytical framework.

Bhide (1992) suggests that entrepreneurs with limited resources do not profit from following a well-defined plan while forming their opportunity. Similarly, Aldrich & Martinez (2001) suggest that nascent entrepreneurs with few resources might change their goals according to the resources they are able to acquire. The suggestions by Bhide and Aldrich & Martinez are similar to what an effectuation process suggests. In an effectuation process, exploitation of contingencies may also lead to change of goal.

Change of goal can be identified among three of the participants in this study; Thadeo, James and Joel. Thadeo is a good example of a change of goal resulting from a contingency. He wants to start an importing business; buying shoes and clothes in Uganda and then selling them to wholesalers in Rwanda. This business opportunity arouse from a contingency. He then acted as an effectuator and exploited that contingency. He explained:

> "I was in Uganda by then, I bought like eight pairs of shoes, I didn't have an idea of selling those shoes, so I brought them to Rwanda and when I got home a friend of mine asked me: What are all these shoes for? Why don't you sell them, and indeed I sold them and now I earned more than I invested, I earned double the money I bought the shoes" (9:40).

Thadeo did not buy the shoes with the intention to start an importing business. But he followed the advice of his friend and sold the shoes; thus he effectuated. This is in line with the perspective that opportunities are created, as stated by Alvarez & Barney (2007, p. 15):

> "An action that emerges without any self-conscious planning or foresight can begin a process of action and reaction that leads to the formation of opportunities."

It is also connected to network, as it was his friend, his network, who gave him the idea of selling the shoes. Thus, changing goal and exploiting contingencies, as Thadeo did, may be linked to using one's network, by allowing other people to influence the opportunity formation and be willing to change direction accordingly.

As Thadeo experienced that he could sell the shoes profitably, he developed his business idea. In the language of effectuation, he acted according to a contingency and reacted according to response from customers. He had not planned anything from the beginning, but was driven by contingencies and the good response from customers, just as effectuation suggests. Thadeo further changed his goal when he went to Uganda and got the idea of importing other things as well, as he wrote in this diary:

> "I have been to Uganda and I have checked out what would suit with the kind of business I want to do. And yes I got some. In addition to shoes and clothes, I am taking in electronics such as mobile phones and cameras" (diary, 7.4).

On his trip, he also came up with a new business idea, however not abandoning the original one, as he continues,

> "still in Uganda, I am thinking about starting a different kind of business here. This is way different from my other business idea. I am thinking about agribusiness which is rearing cattle which is especially rearing cows and setting up a farm. Western Uganda seems to be favourable for this, but I need to meet a few people who are already doing this and get that big idea of how this is supposed to be done. Now, who am I going to contact?" (diary, 19.4).

Thadeo saw a new opportunity at his trip to Uganda. This shows that he is ready to change his goal when finding the right resources to start up another business. He effectuates and lets his opportunity be formed through new contingencies and people he meets. However, he sees this new opportunity mostly as something he will do in the future as he now has to study and he will therefore continue with the old idea first (diary, 24.4). James' idea for changing his business also came forward in the diary, where he expressed that he had completely changed his business idea as he was not able to find the resources for the one he first had (diary, 7.4).

Joel started his opportunity formation by writing a proposal for a business competition arranged by the Rwandan Private Sector Federation (PSF). Thereby he started with a causation process, as it takes planning and analysis to write a business proposal. However, this did not come to fruition, and he decided to finance it himself (12:12). Then his idea developed and the way his website looks now is not as he had planned it when writing the business proposal, as he explained:

> "That I took to the PSF was just strictly to the commissioner; put into contact the buyer and the seller. But right now the website that I have, it combines all. It has that thing of combining buyers and sellers and it has another part to make known local products to the outsiders" (12:30).

He further explained:

> "I had an idea of being an intermediary between buyers and sellers […] then after, I was like, let me change, let me put different things; education, agriculture and tourism things and so on" (24:00).

This shows that he let his business change according to new ideas he got as he moved along. He also changed the target customer along the way:

> "Actually, I was targeting first mainly our local people, but as those things I am putting on my website, booking online and you know renting some houses and so on, there are people outside which will need those services, so it has to be in English and French" (33:14).

Even though both Thadeo and Joel have changed their goals in the opportunity formation process, they also expressed that they are following a plan, as in a causation process. They are thereby good examples of how the two processes are difficult to separate and may practically be overlapping. Thadeo for example said, "I made a plan and I stuck to my plan, I never deviated at any time" (24:45). The plan was about accumulating enough money to be able to start a business and can be linked to causation in two ways. Firstly the fact that he followed a predefined plan, secondly due to the fact of acquiring resources he did not possess. However, these resources were not acquired to fulfil a specific goal, but rather they were acquired to increase his controlled means and give him more room to manoeuvre when starting his business. Joel also said he had made an action plan for his business, which is a sign of causation. Part of his plan is to translate his website into various languages.

As stated by Brinckmann et al. (2010) firms operating in unstable or uncertain environments might not benefit from planning too much. They suggest that this is the case for many new firms.

It may be even more so for new firms operating in a developing country, which is often characterised by uncertainty due to macro-economic instability (Acs & Virgill, 2010). Even if the institutional environment in Rwanda has recently improved, it is still affected by the fact that the country went through a war just 17 years ago, which left the country with no institutional infrastructure. Thus, planning may be disadvantageous in a country like Rwanda, where flexibility and adaptation to changing circumstances may be more suitable.

5.2 Principle 2: Control versus Prediction

The second principle that differentiates effectuation and causation concerns whether the opportunity formation is based on a prediction about the expected returns, as in causation or if the returns are not predicted, but instead actions are controlled and in the case of failure, the loss will be affordable, as effectuation suggests. This can be linked to the factor capital, in the sense that in effectuation the invested capital is based on affordable loss whereas in causation the investment is based on predictions about expected returns.

Some of the participants point to their expected returns. About his expected profits, Thadeo for example said, “I am not so sure about the profit” (13:08). However, he has made some calculations and he said that he only has to sell 60 % of what he buys in order to get back his investment (13:12). This is a sign of causation, as he has calculated his returns and his opportunity formation might, among other things, be based on these calculations. Steven also made calculations, “we also calculated about what we are going to gain and we gave ourselves a goal” (11:10) he continued, “lets say, we clean three individuals’ home per day, how much will we be earning?” (11.40). Louise has formed her opportunity based on her knowledge about that she will be able to sell her product for half the price of current available shops, thereby she has some predictions about her profit. The predictions made by the participants were based on their knowledge, not on external information. Making accurate predictions requires a certain amount of information about the market which might not be available in developing countries. This may lead in the direction of an effectuation process because lack of market information makes the future unpredictable and thereby an effectuation process most appropriate, as effectuation allows for taking action even with uncertainty about the future.

Working through control and affordable loss can also be identified among the participants. After having tried to open and close a business, Peace now recognizes that her next business will start small and she will make sure she is able to save, and have back-up savings if she meets challenges (20:31). This shows that she is now more aware of what she can afford to do. She has realized that doing business is living with uncertainties about what will happen tomorrow, and as you cannot predict what will happen, it is better to be prepared for these uncertainties by being sure that you can afford to cope with unplanned conditions (21:22). In a language of effectuation she wants to act according to what she can accept to loose and she tries to control the future rather than predicting it.

Thadeo has been able to start his business because he invested his savings, $1000 USD, on an online Forex platform, with the purpose of accumulating money that could later be invested into a business. He knew little about the platform but he invested what he had. For Thadeo a good entrepreneur is someone who is willing to loose his own capital and who risks without knowing exactly what the outcome will be (01:40), as he said, “I have risked and contained the risk in me” (24:07). In his way to start up his business, Thadeo took a risk based on what he could afford and not due to predictions. He invested his money in a platform that he knew very little about. He did not know the expected returns and he thereby recognized that the future is unpredictable, and he did not try to predict it. Rather, he gave it a chance and made sure that in case of failure, the loss would be acceptable for him.

None of the participants in this study have taken bank loans to start up their businesses. They have instead financed their opportunity formations with their own savings and through non-formal channels, for example friends and family. The investments made by the participants were mainly based on capital they had at hand, which may mean that in case of failure, the loss will be affordable. The limited access to finance from formal institutions, a part of the context, may thereby lead to an effectuation process as they were not able to get access to loans that may be more risky and might require more planning and predictions about future returns.

Not taking a loan also allows the participants to operate without being registered. According to Thadeo, registering is a very time and capital consuming process (19:20). As Naudé & Gries, (2010b) point out, the institutional environment in developing countries may constrain registration by being characterised by high start-up costs. This is also the case for Rwanda, if compared with Western countries. However, getting access to certain resources such as credit requires a legally registered business. Thereby, high start-up costs may lead to an effectuation process as effectuation can more easily be applied where businesses are not registered.

The participants focused very much on their insufficient means in terms of capital for their opportunity formation. Also, time was mentioned as a scarce resource (Thadeo, 39:16; Joel; 19.04; Philbert, 31:37). As in effectuation they tried to control their actions by adapting them to their limited financial resources. For example by starting small, as Thadeo expressed, “it is not what I am going to do for a lifetime, but what I want to start with” (8:52). He further explained, “actually I don’t intend to begin with a very big thing; I don’t have a lot of money” (30:10). Further, Thadeo wants to start importing as it can be done on weekends and thereby allow him to study at the same time (29:00). Both Steven and Celestin explained that a reason for them going into cleaning was the limited investment it required (notes from Steven, Celestin: 12:28), and Joel started with a blog, which is free and does not require a lot of time to build (18:52; 20:02; 20:51). Celestin (19:11), Philbert (9:32) and Joel (28:32) mentioned the challenge of not having an office in the beginning. However, they have overcome this challenge and started by having their office at home or at SFB, just as Kim et al. (2006) suggest, nascent entrepreneurs who start with small funds do. Joel’s business requires consistent internet access. Due to limited financial resources Joel is paying for his internet as he goes, meaning that he charges his modem with money when he can and works until it runs out (29:47). This way of working fits very well with Joel’s perspective of an entrepreneur as someone, “who takes initiative to start a business regardless of the resources he possesses” (44:13).

Another way that the participants adapted their opportunity formation to their limited financial resources was the fact that they acted more as reproducers or imitators than as innovators and they entered already established markets. As suggested by Bhide (1992) entrepreneurs with limited financial resources may imitate other firms, which save the cost of market research and predictions. This also supports the argument by Aldrich and Martinez (2001) that nascent entrepreneurs often act as reproducers or imitators. Further, the context of limited market information may also be the reason why most of the participants enter already established markets, as Acs & Virgill (2010) suggest, lack of information about markets might lead entrepreneurs to enter already established markets. The exception is Joel, who due to his IT knowledge from a course he has taken and his contact to the people behind a popular website in Rwanda had the means to be innovative and enter a new market.

The limited resources expressed by the participants may be a result of them being full time students who lack financial resources and spare time. The lack of financial resources may also be a result of them operating in a developing country context where access to finance is often constrained. Compared, a student from Denmark would at all times have the possibility to take a loan through The Danish students' Grants and Loans Scheme (Statens Udannelsesstøtte in Danish), whereas these students were limited by not having access to finance and thus limited possibility of using a causation process for the start-up of their firms.

All the participants want to expand their businesses, and in doing so bank loans start playing a role. Celestin has been taking many loans after his start up, and both Steven and Philbert are thinking about doing it as a means to expand their businesses. Thadeo also mentioned that a loan is a possibility for expansion in the future. This may be a sign that when the firm has reached a certain size, loans from banks become an option. As banks require a plan for paying back the loan, this might require more predictions about future returns, and thereby signs of causation.

5.3 Principle 3: Stakeholder Commitment versus Market Analysis

The third principle considers if an opportunity is formed based on commitment from stakeholders, such as customers, suppliers and competitors which decrease uncertainty or if the opportunity is formed based on market analysis. This is linked to networking, as creating commitment from stakeholders requires that the entrepreneur engage in networking activities.

In general, the analyses of competitors done by the participants were not done comprehensively. Louise mentioned her competitors. From being a student she knows her competitors and has made the narrow analysis that she will be able to compete with them if she buys a photocopying machine which can copy two pages on one. Steven has also given a thought to his competition. He said that he started a cleaning business because no one wants to be in cleaning, so it is a good place to be (notes from interview). The fact that Peace formed her opportunity based on her knowledge about the lack of competitors in the surroundings of SFB can also be said to be a small competitive analysis. Similarly, Joel mentioned that his website is the first one of its kind in Rwanda, meaning that competition is limited. The only competing website is www.igehe.com, which is similar to his, but he knows exactly what the differences are, and he also has plans to make his different by adding other languages (40:38; 41:16).

None of the participants mentioned that they have done an analysis to determine their target customers. Yet, some of them did choose their target customers beforehand. In doing that, they also did minor market and customer analyses based on their own demands as customers and experience. Based on these limited analyses, some of the participants decided students to be their customers.

Making competitive analyses and deciding on a target customer is part of a causation process. However, the analyses were not done thoroughly. The limited resources in terms of capital, time and information might explain why no comprehensive market or target customer analyses have been carried out by any of the participants. The analyses were based on controllable knowledge, some deriving from network. Effectuation thus also plays a role as their means such as knowledge about the market for students leads them to their end: a business targeting students. This is another example of how the two processes sometimes overlap showing that it can be difficult to determine whether decisions and actions belong merely to one or the other.

Instead of analysis, effectuation suggests to use one’s network to create commitment from stakeholders. It allows starting a business without having done a lot of market analysis, because commitments may decrease uncertainty.

The participants in this study also made use of their networks to decrease uncertainty. Thadeo had for example been talking to business people in Rwanda, making sure that there would be customers for his products (10:40).

> “So I talked to one called Frank, he also has a wholesale shop […]. Business is not yet so exhausted, it still has a very wide gap to cover, so he told me I can go ahead and do it. So now I have at least some certainty that at least I will make some profit” (23:00).

Thadeo also went to the Eastern Province, where he created commitment from a customer and gained certainty about the availability of customers there. He saw how the shops there were lacking clothes and shoes and made a deal with one of the wholesalers who were willing to buy his products (14:45). In this way Thadeo creates commitments from customers to decrease the uncertainty of entering the market. Louise also had a network that decreased uncertainty, because she knew many of her customers beforehand which gave her credibility and thereby, certainty that customers would come to her shop (18:05). As many of the students know her, they were willing to use her services instead of others, (13:34) and also spread the word about her cheap services (16:00).

The importance of the first customer for the opportunity formation also shows signs of effectuation, where the first customer often becomes the target customer. For Steven the first customer was crucial. With 20,000 RwF (app. 180 DKK) Steven and his friend started their cleaning business by convincing a company to let them clean a sample of their chairs. The company liked it and had them clean all their chairs, which gave them 300,000 RwF (app. 2700 DKK). This capital helped them to start their company. Thereby, as effectuation suggests, the first customer was crucial for Steven's company, as he explained:

> "We had no money; the money we got was from the client. Because, like, the first client we served is the one who helped us" (14:20).

Further, the first customer was the one giving him and his partner the confidence to start the company and the feeling that there was an opportunity here, "after that first customer, it convinced us that everything is possible" (16:48).

Similarly, Philbert's business grew when he was able to get an order of printing 21,000 t-shirts for the Ministry of Education. This order helped him to get other clients, as he said:

> "I did it, I deliver on time, from there people begin to trust me. I do well, on time and rapidly, so from there I start to get work from PSI, from World Vision" (26:31).

As with Steven, the first big order was crucial, it was this first customer that helped form his business and helped him to get other similar orders. Steven and Philbert formed their opportunities without having to do any analysis, because they had orders and confidence about the market from their first customers.

Philbert got that first order through his network. He knew someone in the ministry who had information about the market, as he said:

> “I had someone there in the ministry, he told me that there is a market, come and depose your price as cheap as possible. So he told me to reduce the price, the cheapest one. Then they will give you. It is how I got that one” (27:10).

Similarly, the first tender Celestin bidded for was based on information from someone he knew, who told him that a tender was about to start (15:52). These examples of information about customers gained through network may be linked to the developing country context. As Atieno (2009) states information may, in developing countries, be accessed through networks instead of for example formal institutions.

Philbert and Celestin also built their opportunity formation on commitments from stakeholders in terms of suppliers who were willing to provide materials or work for them and be paid later (Celestin, 17:13). As Philbert said:

> “I came and I meet other artists work from here in town. I tell them; I don’t have money but I have this work. So just believe me, work this for me, then, I am going to ask for money, I will pay you, it’s the way I started” (15:18).

This was also the case when he got his first big order of printing of 21,000 t-shirt from the Ministry of Education. As he did not have the investment to do the order, one of his friends agreed to invest in the business. He paid for the white t-shirts, and Philbert did the printing. They would then split the profit (18:14).

5.4 Summary of Analysis

The analysis shows how the participants in this study formed their opportunities when they were starting up their businesses. Below follows a summary of the findings for each of the three principles.

In relation to Principle 1, which concerns whether the opportunity is formed based on available means as in effectuation or based on a specific desired end as in causation, the analysis showed that there is a tendency toward applying a process of effectuation by the participants. This is shown by the participants being mostly motivated by a vague desire to start a firm and not a specific opportunity, by the influence of possessed knowledge and finally by the fact that the participants did not make comprehensive plans for their new ventures, but many of them changed their goals. In terms of network, the analysis revealed that determining whether a network helps shaping the opportunity as in effectuation or is used to acquire needed resources is difficult to determine. Processes belonging to both were determined among the participants.

Summing up on Principle 2, the participants did not make accurate predictions about their expected returns, but limited ones, based on their controllable knowledge. Rather, as effectuation suggests, their investments were based on what they could afford to loose and they tried to control what they did by adapting their actions to their limited financial resources. They started small and entered already established markets.

The analysis of Principle 3 reveals that the participants did, as causation suggests, make limited analyses regarding competitors and customers. However, these were, maybe due to the limited financial resources of the participants, based on controllable knowledge, experience and network, showing that the processes of causation and effectuation overlap. As in effectuation, networks were used to decrease uncertainty by creating commitments from customers and suppliers.

In general, the participants mainly did effectuation, yet, signs of causation can also be determined. The findings, corresponding to the principles, are summarized in table 5 below, which is structured similar to table 1 in section 2.5 on analytical framework.

Principles	**Opportunity Formation**	
	Effectuation	**Causation**
1. Available means versus specific desired end	Motivation came from a vague desire to start a firm	Motivation did not come from the desire to create one specific firm
	The opportunities were mainly formed with basis in controllable knowledge Networks helped forming the opportunity	Information and knowledge were not searched for Resources were acquired through networks
	The opportunity formation processes included change of goals and exploitation of contingencies	Limited plans were made
2.Control versus prediction	Investments were mainly based on affordable loss and actions were controlled	Limited predictions, based on controllable knowledge, were made
3.Stakeholder commitment versus analysis	Networks were used to decrease uncertainty by creating commitments from customers and suppliers.	Limited analyses, based on controllable knowledge, about customers and competitors were made

Table 5: Summarising the empirical findings

The context may enhance the preference for using effectuation. The participants are students operating in a developing country, thus their resources in terms of market information, capital and time may be limited and quest a process of effectuation. The next chapter will, among other things, discuss the generalizability of the empirical findings.

Chapter 6. Discussion

This chapter is divided into four sections. The first section reflects upon the generalizability of the empirical findings; the second discusses the applied theories and methods. The third section deals with the concept of opportunity presented in chapter two, and finally, based on the findings, the fourth section provides suggestions for implications regarding entrepreneurship education at SFB.

6.1 Discussing the Empirical Findings

This dissertation analyzes the opportunity formation process among eight students at SFB in Kigali, Rwanda. It shows that the students primarily applied a process of effectuation when starting up their ventures. They did not make comprehensive opportunity search, accurate predictions, competitive analysis or followed a specific plan, which are all part of a causation process. They were not driven by one specific opportunity or venture and they were willing to change their goals. As in effectuation, they formed their opportunities based on controllable knowledge about markets, they used their networks to decrease uncertainty, and investments were based on affordable loss.

The findings of this dissertation are a result of the setting in which they were created. They are made based on how eight students from SFB in Kigali perceive and interpret reality combined with the researcher's preference for gathering and interpreting these perceptions. Thus, the empirical findings from this study may not be applicable to other settings and maybe not even to the same setting at a different point in time. For this purpose further research is needed which could use the same theories and methods in a similar context to see if findings from this dissertation can be replicated to other developing countries. Applying the theories and methods to a completely different context to further investigate the influence of the context on opportunity formation processes, could also be interesting.

There are some indications that the opportunity formation process that these students go through may be similar to that of other nascent entrepreneurs in other developing countries. As Sarasvathy (2001) points out, effectuation is preferred where resources are scarce and in unstable and dynamic environments, where too much planning will make the firm too rigid and inflexible (Sarasvathy, 2001; Brinckmann et al. 2010). As this may be the situation in other developing countries, effectuation might be applied there as well. Further, the fact that the private sector in developing countries is often comprised by many small firms (Naudé & Havenga, 2005) may also be a result of effectuation processes. According to Sarasvathy (2001), effectuation allows an economy to experiment with a bigger number of opportunities with lower costs, because effectuation firms, if they fail, will do it early and with a lower investment than firms created through causation (Sarasvathy, 2001).

Both Aldrich & Martinez (2001) and Brinckmann (2010) point to the fact that nascent entrepreneurs often start with scarce resources, which may lead them to change goals as in effectuation. This is in line with what Kraaijenbrink and Ratinho (2008) found, namely that effectuation strategies often are followed by nascent entrepreneurs. Thus, other nascent entrepreneurs may also be likely to apply an effectuation process when they want to start up their new venture.

This study has included a relatively small number of participants, and preferably such a study could have been combined with a quantitative study, from which generalization to other students would have been possible. However, this study gives a broad understanding of the opportunity formation among the participants. Further, the limited scope of this dissertation in terms of time and space did not allow for that combination. What this qualitative study can do is, as stated by Bryman & Bell (2007), to generalize to theories to further develop and expand the applied theories. This will be done in the next section.

6.2 Discussing the Applied Theories and Methods

Even though the applied theories were mostly developed in a Western country context, they have been useful to understand the opportunity formation process of students in Rwanda. However, this study also shows that being aware of the context where such a research is carried out is important as the context often will, as suggested by Johns (2006, p. 389), vary more than individual differences across research sites.

Applying the processes of effectuation and causation have kept focus on actual actions and helped analysing the steps taken by the participants and the rationale behind them. This dissertation shows that contrasting the two processes may lead to interesting findings. However, the analysis has also revealed that it may be hard to determine whether actions belong to the one or the other, and that the two processes are very much interlinked and often overlap. Thus, operationalizing them seems to be crucial, and even in doing so it might still be difficult to differentiate them. For example, the predictions and analyses done by the participants in this study can be linked to both causation and effectuation. The predictions about expected returns and analyses about competitors or target customers done by the participants were not comprehensive. They were done based on controllable knowledge and experience and it may be just the appropriate amount of prediction and analyses for these nascent entrepreneurs who start businesses with limited resources. This shows that you can take a starting point in available means, which is an effectuation principle, and still do causation. However, the causation will be based on available means. The participants did not have the resources to make thorough predictions about the market or expected returns from the firm they want to create, and therefore they made only limited predictions and analyses that were based on the knowledge and experience they already possessed. Thus, taking a starting point in available means may lead to the determination of how causation should be applied under the specific circumstances.

As entrepreneurs often apply both processes, which is also the case in this study, it can also be discussed whether separating actions and decision into such two processes makes sense at all. The different dimensions within each process are not dependent on each other, thus it might not make sense to talk about them as two different models called effectuation and causation, and as Kraaijenbrink (2008) suggests the distinction between effectuation and causation might be an oversimplification. Instead each principle may be handed separately, which is also what is done and has shown suitable in this dissertation.

Combining the two processes with other factors has proved valuable in the sense that the factors helped operationalizing the processes and concretize what to look for with regards to the processes. Incorporation of the factors motivation, knowledge, capital and network has also given a broader understanding of the opportunity formation process of the students.

What is clear from the analysis in chapter five is that the opportunity formation processes of the studied business students from SFB in Rwanda can not be put into one theoretical scheme or figure that can capture the complexity. This indicates the relevance of incorporating different concepts in a study concerning opportunity formation processes. Even though the participants mostly applied effectuation, processes connected to causation were also applied. Further, as the analysis shows the influencing factors are interlinked. This study especially shows that network seems to be linked to other factors. Motivation, capital and knowledge may all derive from a network; motivation from family, capital from friends and family and knowledge from the network of students. Further, knowledge from education may be connected to network as the fact of being a part of an education may broaden one's network.

This study has also revealed that studying process is complex and requires multiple data collection methods and a long data collection period. For example, ethnographic methods may be valuable in the study of process. The data collection methods used in this dissertation, such as semi-structured interviews and diaries have proved to be beneficial and provided enough information to answer the research question. The diaries gave valuable information especially in order to identify changes in goals and ideas. However, not all participants found the time to write the diary. Instead, an idea could be to make a follow-up interview one or two month after the first interview with the purpose of understanding the actions and decision taken since the first interview. Further, future research that wishes to determine even better which parts of a causation and effectuation process an entrepreneur goes through, would probably gain from focusing even more on real-time research, where the researcher can be with the entrepreneur in decision-making situations.

Before presenting the implications for entrepreneurship education, the next section will deal with the concept of opportunity.

6.3 A Further Perspective on the Concept of Opportunity

The discussion about opportunities presented in chapter two is focused around whether opportunities, as suggested by Shane & Venkataraman (2000), exist independently from the entrepreneur and thus the job of the entrepreneur is to discover them, or if they are created by the entrepreneur and come into existence due to the actions of the entrepreneurs, as suggested by Alvarez et al. (2010) and Sarasvathy et al. (2010). The first view belongs to a realist perspective, whereas the later belongs to a constructivist perspective.

This study shows that opportunities may be seen from a combination of the two. This conclusion derives from the observation that the opportunities that the participants in this study form, do not seem to be fully discovered, as full information about them and their profitability does not exist before the participants start forming them, however, they do not seem to be created either, as most of the opportunities were formed within already established markets and were imitating others. Rather, the students seem to have formed their opportunities based on information they possessed about the market, which made them alert to certain opportunities. This is in line with the realist perspective; however, these opportunities were not fully defined from the beginning, but were modified and redefined through the actions of the entrepreneur. This is a combination of the two views, where opportunities do exist independently from the individual, but are dependent on entrepreneurs who perceive them as such. Further, in accordance with the evolutionary realist approach suggested by Alvarez et al. (2010), they only materialize through actions of entrepreneurs.

6.4 Implications for Entrepreneurship Education

The best way to teach and learn entrepreneurship and how learning influences decisions and actions lies outside the scope of this dissertation. However, by drawing on the findings from this dissertation about what students do when they start up their businesses, and observations of what they are taught, this section will provide suggestions regarding entrepreneurship education at the Bachelor in Business Administration programme at SFB. The provided suggestions may be used for other involved in entrepreneurship education development or execution.

When designing entrepreneurship education it is important to stimulate both effectuation and causation. As pointed out by Kraaijenbrink et al. (2011) both processes may lead to success, and it may be the right combination of the two that leads to success. Sarasvathy (2007) also explains that she teaches both processes and how to understand and use both of them effectively. Thus, teaching according to both seems to be appropriate.

However, it seems that focus on stimulating effectuation is very limited at the Bachelor in Business Administration programme at SFB. The entrepreneurship course is built on a causation logic, where the students are taught to do a feasibility analysis and write a business plan. Further, it is focused around already established businesses and not on the initial start-up of a new business. The inappropriateness of this method is further enhanced when looking at what the student do when starting their new ventures. The students in this study act mostly through processes of effectuation or through causation processes that require few resources. Applying teaching methods that facilitate the process of effectuation, and adapt the teaching of causation to the resources of the students, might be a way forward for enabling more SFB students to become entrepreneurs.

Teaching effectuation can be done for example by using a “push method” where students are pushed into taking action (Kirketerp & Korsgaard, 2007). Thus, teaching *for* entrepreneurship and not just *about* entrepreneurship. Sarasvathy (2007) suggests to always let teaching focus around the student’s own new ventures instead of general theory and best practices. In doing that, she emphasizes that the students should not wait for a novel and extraordinary opportunity, but go for the mundane and feasible. Using such a method, where the students get time to work their own projects, would also fit the current circumstances at SFB where having 300 students in a room with bad acoustic only two hours a week might limit the learning for the individual student.

Another idea, suggested by the entrepreneurship lecturer at SFB, would be to provide internships in small newly started businesses, where the student could be linked to business opportunities, experience an entrepreneurial environment and create a network.

SFB could also start working with other parameters than the academic programme. As this dissertation shows, the students form their opportunities based on, among other things, their network and knowledge from being students at SFB. SFB could take advantage of that by facilitating networking among students or create business opportunities for the students at the campus.

These are suggestions and further research is necessary to determine whether they will practically be beneficial.

Chapter 7. Conclusions

This dissertation has sought to answer the research question: *How do students at School of Finance and Banking in Rwanda form opportunities when they are starting up businesses?*

This has been empirically studied by applying a qualitative multiple method approach, including interviews, diaries and observations to understand the opportunity formation among eight business students from School of Finance and Banking in Kigali. Theoretically, this dissertation has applied the concepts of causation and effectuation, combined with the influencing factors motivation, knowledge, capital and network. This conclusion is divided into two parts; the first presents the empirical conclusions and the second the theoretical conclusions.

7.1 Empirical Conclusions

The students from School of Finance and Banking did not form their opportunities using one specific formula. The opportunity formation processes were composed by a mix of effectuation and causation, and the influencing factors, motivation, knowledge, capital and network. However, some patterns did occur, and the overall conclusion is that the students have mostly acted through a process of effectuation.

The participant's were mostly motivated by gaining independence. Further they had the motivation to start up a business before they identified an opportunity, and therefore they did not go into business to exploit one specific opportunity, but with a more vague desire to start a business, which can be linked to an effectuation process.

The participants did not search for knowledge, which would be a part of a causation process. Rather, they made use of their controllable knowledge when forming their opportunities. The knowledge mostly came from former work experience and from being customers in the market. SFB has equipped the students with knowledge, which seems to be mostly regarding business management and built on a causation logic. Applying teaching methods that facilitate the process of effectuation, and adapt the teaching of causation to the resources of the students, might be a way forward for enabling more SFB students to become entrepreneurs. SFB has also provided the students with knowledge about the market for students and a network of students. This has resulted in the students starting businesses where the target customers are students.

As in a causation process, the students made small market analyses about competitors and customers and some decided their customers beforehand. These analyses were based on their controllable knowledge, thus it is also a way of effectuating and taking a starting point in current means. Comprehensive analyses about competitors and customers were not carried out nor were thorough plans made and followed. As in effectuation, change of goals was common among the participants.

Some of the participants have, as in causation, made predictions about their expected returns. However, their opportunity formation processes were mostly based on affordable loss as in effectuation. The participants financed their start-ups with capital they had at hand either from own savings or from family and friends. Further, as effectuation suggests, the participants controlled their opportunity formation processes by adapting to their limited financial resources. They started small and entered already established markets.

The students expressed that limited resources in terms of especially time and capital posed a challenge to their process. Starting with few resources seems to be the speciality of the participants in this study, and also something that forced them to act through effectuation where available means in terms of knowledge, capital and network, became the main driver for the opportunity formation.

The participants in this study made broad use of their networks in their opportunity formation processes. Networks were used to create commitments from stakeholders such as customers and suppliers to decrease uncertainty of entering the market, which is connected to a process of effectuation. Experience was also gained through networks, which in this case also lead to a process of effectuation as the experiences helped determine the actual opportunity. Resources such as market knowledge, new ideas, investment and skills were also acquired through networks. Determining the process here becomes difficult as it is not easy to determine whether resources were gained to exploit a specific opportunity as in causation or if the network helped forming the actual opportunity as in effectuation. Actions and decisions belonging to both processes were seen among the participants.

The participants have been studied as part of a wider context, and their use of effectuation may be enhanced by the context they are operating in. Being students in a developing country, they might not have possibility to form their opportunities through causation due to lack of resources. They operate in a developing country, where access to finance and information about markets often is constrained, and due to their status as university students they also have limited time. Causation requires a certain amount of capital, time and information in order to be able to make adequate market analyses and predictions about future gains.

7.2 Theoretical Conclusions

The concepts of causation and effectuation have been useful for studying processes. However, determining whether actions and decisions belonged to the one or the other was in some cases difficult. Operationalizing them before applying them seems to be crucial. In this dissertation that has been done by combining them with other concepts from the literature on the subject of opportunity formation. Such a combination has not been done before, and this dissertation has developed theoretical and analytical frameworks consisting of the concepts of effectuation and causation combined with the four influencing factors, motivation, knowledge, capital and network. The frameworks have proved suitable for giving a broad understanding of the opportunity formation processes and capturing the complexity. The analysis also showed that the influencing factors are interlinked.

The entrepreneurs in this study have applied both effectuation and causation and some actions can even be said to belong to both. For example, predictions and analyses were done based on controllable knowledge and network. The students take a starting point in available means, as effectuation suggests, and yet they do causation. This shows that causation may be done even with limited resources and that taking a starting point in available means may lead to the determination of how the two processes should be applied under specific circumstances. This supports the view that separating the two processes might be an oversimplification.

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Chapter 9. Appendices

9.1 Short Descriptions of the Participants

The following gives brief description of each of the participants and their businesses.

Thadeo

Interview: 22nd of March, 42 minutes.

Thadeo is in his 2nd year at SFB as a full-time student. He grew up in Uganda where his family is in the hotel business. He realized that he wanted to start a business himself when he, after finishing secondary school, had a job and experienced that he could not live with other people telling him what to do.

His first step of starting a business was to invest money online with the purpose of being able to accumulate money that could be invested into a business. He will withdraw some of the money in August 2011, where he will start his business. The idea for his business came to him by coincident. He bought 8 pairs of shoes in Uganda for himself, but a friend advised him to sell them, which he did and found that it was a good business. His idea therefore is to start an importing firm, importing, among other things, clothes and shoes from Uganda and selling it to wholesalers in Rwanda. He has experience with importing and contacts to wholesalers who are willing to buy his products. Further, he chose to start an importing firm because he can do it while studying. However, he also wants to start up other businesses in the future.

Steven

Interview: 23rd of March, 48 minutes (recorded only 28 minutes, due to problem with the recorder).

Steven is in his 3rd year at SFB as a part-time student. He grew up in Uganda. After finishing secondary school, he was not able to get a job and he wanted something more, he therefore started a cleaning business together with a friend in 2007 and the business was registered in 2009. They started cleaning chairs in private homes, but the business has developed and now they also have corporate customers. Steven has many ideas for expanding his business even further.

Steven also wants to start a car-renting company. He is renting a car himself and he therefore has knowledge about the market. Steven's motto is that "Life is a succession of lessons that must be lived to be understood."

Joel

Interview: 29th of March, 45 minutes.

Joel is in his 3rd year at SFB as a full-time student. He grew up in Rwanda in a family of entrepreneurs. Before starting at SFB, he did a one and a half year IT-course at Kigali Institute of Science and Technology. When starting at SFB he wanted to combine his IT skills with his business skills and he decided to build a website. He participated in a business plan competition with a website that was mainly an online second hand sales platform, but when he did not win, he decided to finance his business himself. Currently, his website, www.irebero.com, contains many different things; news, advertisements for hotels and restaurants, online sales etc. Being innovative is for Joel important when starting a business, and according to him his website is the first of its kind in Rwanda. The website is right now in the local language Kinyarwanda, but Joel's plan is to translate it into English, French and Swahili as well. From April 2011, he will start charging companies who advertise on his site a fee and in that way make it profitable.

Philbert

Interview: 29th of March, 50 minutes.

Philbert is in his 3rd year at SFB as a part-time student. He started his graphic design business in 2006 after finishing secondary school. While he was still in secondary school he worked for a friend from his village in his holidays. They were making mainly students cards and badges for schools. From having that job, Philbert gained skills within graphic design and clothes printing and he also got contacts. When Philbert finished secondary school, he broke with his friend and as he had both contacts and skills within the field, he started on his own. The beginning was tough and with very little financial gains. But finally in 2008 he got a big order from the Ministry of Education to print on 21,000 T-shirts. He spent two weeks together with around 45 workers in his home printing logos on those 21,000 T-shirts. From the profit, he was able to pay school fees to start studying at SFB. Starting at SFB is both a way of opening up his mind in terms of doing business, but also a security if his business fails. The first big order gave him many others, and he now as an office in the centre of Kigali and around four people working for him.

James

Interview: 30th of March, 31 minutes.

James is in his 3rd year at SFB as a full-time student. He grew up in Tanzania and Uganda and came to Rwanda for the first time in 2000. James has already started and closed two businesses. While in secondary school, he started a small banking business together with fellow students. They were lending money to fellow students so that they could pay their transport for going home in the holidays. After secondary he started a canteen at his uncle's boarding school, which he ran until he started studying at SFB in 2009. During the interview he explained that he was in the process of starting up a clothes shop for SFB students, expected to open in May. He was lacking the capital to start, but would try to get it from his sister. However, in his diary his idea had changed to a shop selling airtime at Kigali Management Institute, as this would require less investment.

Celestin

Interview: 5th of April, 55 minutes.

Celestin is in his 3rd year at SFB as a part-time student. Celestin has been at the job-market since 1998. In 2004 he started his own cleaning company after having worked for another cleaning company for a couple of years which gave him the knowledge and skills to start something himself. He registered his company and bided for a tender at Muhima hospital in Kigali, which he won. That led him to other bigger tenders at other hospitals in Kigali and in 2008 he had around 340 cleaners at different hospitals. He also started supplying bed-sheets, which he bought in Uganda, to the hospitals. His company is working mostly in the public sector, but he is now starting to move into the private as well and also expanding into other fields such as garbage collection. He wants to make a group of companies where cleaning is one section.

Louise

Interview: 19th of April, 42 minutes.

Louise is in her 3rd at SFB as a part-time student. She used to be a full-time student, but she shifted in order to get time for her business. She is an orphan of the genocide and lives with her uncle. She started her business in 2010 with a desire to reduce the cost of copying for her fellow students. Students at SFB copy everything; notes, books, slide-shows etc.. She bought a photocopying machine that could print two pages on one, which made her able to compete with current photocopying shops available at SFB. She now has a small shop close to SFB where she does photocopying, printing and cutting. She also supplies paper to the photocopying shops at SFB. Her challenge is that the students do not need her services continuously, but mostly in the periods of exams. She would like to buy even better machines that can for example copy on both sides, but she is lacking the required investment.

Peace

Interview: 13th of May, 31 minutes.

Peace is in her 3rd year at SFB as a full-time student. She grew up in Uganda. After studying one year at SFB, she started a business together with her sister, mainly to find occupation for her sister who did not have anything to do. With capital from a family member, they started a milk-shop in the beginning of 2010 targeting SFB students as they experienced limited access to milk close to campus. Their first challenge was that their shop was too far away from the campus so they had to shift. Their second challenge came when the cooler they had rented stopped working and they did not have enough back-up capital to continue. Therefore, they had to close down the business in April 2011. Peace wants to start another business, but not until she finishes her studies and has saved enough money for the start-up investment.

9.2 Interview Guide

This interview guide is only for guidance and making sure that all fields have been covered in the interview. Not all questions are asked in all interviews and not in the same order.

Introduction
Your answers from this interview will be used for my master thesis, which is about how students start up businesses.

Is it okay that I record the interview?

Background information
Purpose: Getting the interview started
Tell a little about yourself and what you have done before studying at SFB
Where did you grow up?
What do your family do?

Level of entrepreneurial activity
Purpose: Finding out how far the student is in the entrepreneurial process
To you, what is an entrepreneur?
Are you an entrepreneur? Why?

Motivation
Purpose: Exploring how the student ended up with the idea of wanting to start his/her own business.
Tell me about the process that made you decide to start your own business.
When did you first learn about entrepreneurship?
Why do you want to become/be an entrepreneur/start your own business?
When did you realize that you would like to start your own business?
What made you realize that you wanted to start your own business?
Have you considered looking for a paid job instead? Why/why not?

Opportunity formation
Purpose: Exploring how the participant form/formed his/her opportunity, which skills did/do he/she use (motivation, knowledge, capital and network) and which process (effectuation/causation).
Tell me about the history of your business
Tell me about your idea and how you came up with it.

Who came up with it?
When did you get the idea? And how?
How has your idea developed?
Have you discussed your idea with anyone? What was their response?
Why do/did you believe that your idea is a good business idea?
Which step did you take when starting your business? Why?
Where have you found the resources?
Who/what helped/helps you the most?
What have been crucial events in your business so far? Why?

Which challenges have you met? How do you come about these challenges? Why like that?
What could have helped you on the way?
What has been easy? Why?
Do you want to expand your business? Or start another one? How are you doing that?
What keeps you going?
What are the next steps for your business? Why?
What do you need the most right now to proceed?

Education
Why did you choose to study Business Administration?
How has your BBA/SFB helped you in the process so far? What have you learned/gained that you are using?

Other questions
Do you have a role model? How are you using him/her?

How does your business look like if I come visiting you in one year – two years – three years?

Is there anything you would like to add?
Is there anything you would like to ask me?

Are you willing to participate in the diary writing?

Supporting follow-up questions
What do you mean when you say….
Can you give me an example of that?
Remember being silent often makes people talk

9.3 Diary Template

Diary

Name:

School of Finance and Banking

Kigali- Rwanda

March, April and May 2011

Dear Participant

First of all I will like to thank you for committing yourself to participate in my project. I really appreciate your help and I am looking forward to work with you during the next months.

The research project I am doing is about how students start up businesses. All participants are students who study the Bachelor in Business Administration at School of Finance and Banking and who either have a desire to start a business or who already have started one.

What I want you to do is the following:

During the next couple of months you write down your thoughts and actions connected to the expansion/development of your business. Which days and when you write in your diary is up to you, but you should do it approximately two times per week.

The questions are meant to guide you; you do not have to answer them directly. Write the things that are important to you in your process of wanting to start your own business.

Feel free to contact me any time with any question.

All the best,

Helle
helle@educat.dk
0785148979

Date:

Have you thought or done anything in connection to the expansion/development of your business during the last couple of days?

What have you thought? What have you done?

Which challenges do you face in connection to your thoughts and actions?