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Entrepreneurial Motivation for Engaging in Business Creation

A study of the composition and complexity of entrepreneurial motivation and motivational change

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Abstract

There is a lack of research exploring the diverse motivations and reasons for why certain individuals decide to engage in entrepreneurship while others do not. Entrepreneurship is argued to be a key driver of economic growth, and it is vital to understand this *why* in order to facilitate for continuous development of entrepreneurial action. The term “entrepreneurship” is ambiguous, and there are several approaches that propose different ways of viewing the entrepreneur. This study explores entrepreneurial motivation amongst different types of entrepreneurs as well as factors that may influence motivational change.

To explore entrepreneurial motivation, we conducted a survey in order to retrieve information from entrepreneurs representing three diverse cohorts: British Tech, Norwegian Art and Young South African. The participants were asked to define their main motivation, rate different types of motivation and to outline whether their motivation had changed since the start-up. The responses revealed that the entrepreneurs were strongly motivated by intrinsic factors, such as self-realization, creating innovative products and controlling their own time. This contradicts to the traditional view of the entrepreneur as an extrinsically driven individual, mainly concerned with generating monetary rewards. However, our results also revealed considerable variation of motivation types between the different cohorts. These findings emphasize the importance of exploring the complexity of entrepreneurial motivation in order to understand what motivates different types of entrepreneurs.

Additionally, we examined the influence of financial, practical, personal and partnership challenges on motivational change. In this part, our analysis did not reveal any remarkable findings. However, the lack of significant results contributes to the assumption that the reasons for motivational change are many and complex. Hence, it may be necessary to study motivational change in a broader context in order to reveal why change occurs. This entails examining the interaction of internal and external factors shaping the environment of the business.

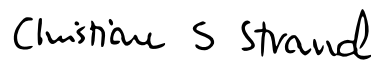
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1. Introduction

1.1 Background

Entrepreneurship is a key driver of economic growth, technological innovativeness and creative solutions, bringing countless possibilities to the world (Nicolaidis, 2011). Through entrepreneurial activities opportunities are identified, new markets are created, and innovative products and services are provided. Thus, entrepreneurs play a fundamental role in enabling continuous improvement of societal and human wellbeing. In developed countries the ratio between entrepreneurs and other workers is 1 to 10. As a contrast, this number is 1 to 52 in South Africa (Friedrich & Visser, 2005). Entrepreneurship functions as a key driver of economic growth and decreases the gap between developing and developed countries. Hence, fostering entrepreneurship is vital to integrate developing nations into the global economy.

In order to understand what makes an entrepreneur entrepreneurial, Sarasvathy (2001) presents the “Theory of Effectuation”. This theory emphasizes the importance of taking action based on the people and resources available at the moment rather than trying to predict the future. She states that those waiting for the perfect idea have to be patient, while those taking action will likely create something interesting and figure out how to make a business of it (Sarasvathy, 2001). This assumption indicates that the entrepreneur is an innovative and action-oriented human being. Further, the theory suggests that instead of following the logic of casual reasoning¹, where an end-target is set initially, the end target should be created on the way. Sarasvathy (2001) suggest that this is more appropriate in entrepreneurial environments characterized by risk and uncertainty.

The entrepreneur is commonly described as a risk-willing, innovative and confident individual. By identifying opportunities and challenging status quo, ideas and opportunities are transformed into reality. Despite this glorified picture of entrepreneurs and entrepreneurial activities, there is little research investigating why certain individuals decide to engage in entrepreneurship while others do not. One could argue that it is crucial to understand the why

¹ Following the logic of causal reasoning, the end goal is set initially before defining a detailed strategy to reach this particular goal (Spellman & Mandel, 2006)

of entrepreneurship in order to facilitate for individuals to develop and contribute through entrepreneurship and creation of new businesses.

Literature points out several reasons why individuals may be motivated to become entrepreneurs. Opportunity entrepreneurs take advantage of those opportunities they find appealing or inspiring. On the contrary, necessity entrepreneurs engage in entrepreneurial actions because they have no other options of making a living (Ute, Hart, Mickiewicz, & Drews, 2015). Furthermore, some entrepreneurs are extrinsically motivated by financial means, seeking to gain profit and to raise capital. For others, intrinsic motivation is more heavily weighted. Thus, self-realisation through inventing new products and being creative are fundamental factors for encouraging entrepreneurship. Others might be driven by idealistic factors, whereas contributing to human welfare or fight environmental challenges are key drivers for motivation. Hence, the reasons why individuals become entrepreneurs are many and complex.

1.2 Purpose

The overall purpose of this master thesis is to explore entrepreneurs' motivation to start their own businesses. We aim to get a deeper understanding of *why* and *how* motivation varies amongst different types of entrepreneurs. Our study is an extension of the GetGiveMakeLive-research paper² and is divided into two parts. In part one, we explore distinct classifications of entrepreneurial motivation. The insight revealed in the first part of our thesis will be compared to the findings of the GetGiveMakeLive-research paper. In the second part we examine motivational change. The insights from this part will be used to outline potential deviations in the entrepreneurs' motivation, and further, elements or circumstances that may influence and lead to a shift in motivation.

² The GetGiveMakeLive-study will further be elaborated in Section 2.8

1.2.1 Problem Statement

Based on the overall purpose of this thesis, the research questions we aim to answer are:

RQ1a: How do entrepreneurs classify their main motivation for engaging in entrepreneurship?

RQ1b: How do entrepreneurs evaluate the importance of different types of motivations?

RQ2: Which factors may influence motivational change amongst entrepreneurs?

1.3 Limitations

Engaging in entrepreneurship is a complex process of planning and performance. Creation of new ventures requires extensive planning of key resources, cost structure, value proposition, customer segments and several other elements. This master thesis will exclusively focus on the motivational element of starting a new venture. Due to the complexity of each element entailed in a start-up process, this limitation is crucial given the purpose of our study. Since our study serves as an extension of the GetGiveMakeLive-research paper, our definitions of entrepreneurial motivation types and cohorts are limited to the ones disclosed in this paper. Therefore, the motivation categories will be narrowed to Get, Give, Make and Live, while entrepreneurial cohorts will be narrowed to Arts, Technology and Young South African Entrepreneurs.

1.4 Structure

To answer the research questions, our thesis will have the following structure: In **Chapter 2**, we explore existing literature regarding entrepreneurial motivation and outline the preconditions and findings of the GGML research paper. In **Chapter 3**, the methodological approach and the design of the questionnaire will be presented. The results from our questionnaire as well as the analysis will be outlined in **Chapter 4**. In this part, we first present our findings regarding the entrepreneurs' classification of main motivation (RQ1a) and further, their evaluated importance of the different motivation types (RQ1b). Thereafter, we outline our findings concerning motivational change (RQ2). A thorough discussion of these results follows in **Chapter 5**. In **Chapter 6**, we discuss limitations of our research and suggest topics for further research. Lastly, in **Chapter 7** we summarize key takeaways from the thesis and provide the reader with a conclusion.

2. Litterature Review

In this chapter we will outline relevant literature and the theoretical background of our thesis. As mentioned initially, there is a lack of research explaining why entrepreneurs engage in business creation. Hence, the amount of literature directly approaching our research questions is limited. In our literature review we therefore outline the elements of existing research relevant for defining “the entrepreneur”. Additionally, we outline distinct factors that may affect the entrepreneurs’ mindset and motivation. In order to cover all aspects of our research questions, we also include an introduction of the GetGiveMakeLive-research paper and its findings as a part of our literature review.

2.1 Definitions of Entrepreneurship

There is a considerable amount of research existing within the field of entrepreneurship, however, there is no clear definition of the term. Three common approaches of defining entrepreneurship are the trait-, behavioral- and opportunity approach (Kobia & Sikalieh, 2010). These approaches focus on personal characteristics, the processes of entrepreneurship, and the outcomes that entrepreneurship may give (Davidsson, 2003). Most definitions are a mix of these three, weighing them differently. In the following sections the three approaches will further be elaborated.

2.1.1 Trait Approach

The trait approach focuses on the personal characteristics and skills that make an individual more likely to engage in entrepreneurship than others (Rauch & Frese, 2007). Three personal characteristics that are commonly pointed out are; (1) the locus of control, (2) the need for achievement and (3) risk-taking propensity. The locus of control is an individual’s degree of control over his or her life. A person with a high locus of control has a strong belief in one owns ability to control the outcome of his or her actions. People with low locus of control believe that their actions are more dependent on external factors, such as luck, other individuals and the environment (Karabulut, 2016). The need for achievement is a person’s drive to succeed, as well as his or her ambitions to overcome challenging tasks. Risk taking propensity refers to an individual’s willingness to take risks and to tolerate the consequences

from it. Hence, the trait approach defines entrepreneurship as a type of personality state of being (Gartner, 1988). Critics, however, argue that even if some personal traits can be verified, they cannot be described as generic (Kobia & Sikalieh, 2010). Furthermore, it is argued that there is a lack of homogeneity between the various definitions of “the entrepreneur”. This implies that there is bigger variation between the various definitions of “the entrepreneur” than between the definition of the entrepreneur and the rest of the population (Gartner, 1988).

2.1.2 Behavioural Approach

The behavioral approach defines entrepreneurship as the creation of new organizations (Vesper, 1982). In this approach, the understanding of entrepreneurship centers around the organization and the actions an individual undertakes to form a new venture. The individual’s characteristics are not given significant means. Examples of entrepreneurial activities are planning, recruiting, production processes and the establishment of legal entities (Shane, Locke, & Collins, 2003). Furthermore, the approach recognizes the differences between the entrepreneurs’ motivation and risk-willingness. However, critics argue that the approach fails to cover the entire picture of entrepreneurship (Shane & Venkataraman, 2000). For example, understanding entrepreneurial activities does not explain the fundamental intentions *behind* them. Engaging in entrepreneurial actions does not necessarily lead to creation of new organizations. Additionally, it is argued that by defining entrepreneurship as the creation of an organization, one fails to explain why entrepreneurs continue entrepreneurship after the establishment itself. This raises the question of where or whether there is an end to entrepreneurship.

2.1.3 Opportunity Approach

The opportunity approach argues that definitions based on trait and behavior fail to address the sources and variations of opportunities. From this point of view, some individuals engage in entrepreneurial activities because they respond to the opportunities that characterize their current situation and surroundings. Hence, entrepreneurship is understood as the study of; (1) the sources of opportunities, the process of discovery, evaluation and the exploitation of opportunities, and (2) the people who identify, assess and exploit them (Davidsson, 2003). Schumpeter (1934) argues that market efficiencies create opportunities for innovative

individuals to exploit and generate wealth. Other researchers argue that innovativeness, prior knowledge and information are the fundamental factors of how opportunities are recognized by individuals (Davidsson, 2003). Research suggests two main categories that impact a person's choice of engaging in entrepreneurship; (1) the level of information, knowledge and innovation and (2) the cognitive capabilities of evaluating the opportunity (Shane & Venkataraman, 2000). Whether an individual decides to exploit the opportunity discovered is decided by a mix of the characteristics of the opportunity and the characteristics of the individual. However, there is yet an unanswered question to why some individuals engage in entrepreneurship and others not, despite having the same skills and opportunities.

2.2 Entrepreneurial Intentions

Entrepreneurial motivation may be defined as the reason or reasons for acting or behaving in a specific way (Simpson & Weiner, 2019). Entrepreneurial intention is understood as the motivation of starting or owning a new venture, or to become self-employed. Motivations and intentions are commonly linked together. This indicates that underlying goals and attitudes of entrepreneurial motivation forms the action of entrepreneurial intentions.

There are two leading theories of entrepreneurial intentions within the research field. Ajzen's (1991) "Theory of Planned Behavior" understands intentions from the following three attitudinal antecedents of intention; (1) attitudes toward the behavior, (2) subjective norms and (3) perceived behavioral control (Krueger Jr, Reilly, & Carsrud, 2000). The two first components refer to the perceived desirability of engaging in the behavior. That entails the individual's attractiveness to an entrepreneurial action. The third component reflects the perceived feasibility. This refers to the individual's belief in his or her capabilities to succeed when engaging in an action. Douglas (2013) describes perceived feasibility as the motivation to exploit. This is closely linked to Bandura's (2010) view of self-efficacy, which centers on a person's confidence in executing a certain action. The strength of an individual's intention to engage in a certain behavior is determined by these three components. As argued by Ajzen (1991, p. 181): "The stronger the intention to engage in a behavior, the more likely should be its performance."

Shaperos and Sokol (1982) present "The model of Entrepreneurial Event". In this model, entrepreneurial intentions are explained by; (1) perceived desirability, (2) perceived feasibility

and (3) the individual's propensity to act. Propensity to act is defined as a person's willingness to engage in a behavior. "The Theory of Planned Behavior" and "The Model of Entrepreneurial Event" are similar in many ways. They both explain entrepreneurial intentions as a combination of capabilities and the individual's willingness to act (Gelderen, et al., 2008). Thus, both suggests perceived desirability and perceived feasibility as fundamental elements of entrepreneurial intentions. Further, they argue that intentions influence the behavior of the individual and leads to planned action.

It could be argued that starting a business is a response to the conditions around us (Krueger, Reilly, & Carsrud, 2000). We consider the environment we live in, evaluate our options and develop plans and business opportunities. Hence, people do not start businesses as a reflex, but instead they reflect and consider their options before they put entrepreneurial plans into action. As argued by Douglas (2013), entrepreneurs will pursue the opportunity that provide the combination of income, autonomy, risk, work effort and work enjoyment that maximize the expected utility. The combination of these elements is dependent on the entrepreneur's intentions for engaging in entrepreneurship.

2.3 Effectual Reasoning

In order to understand and explain the logic behind what makes entrepreneurs entrepreneurial, Sarasvathy (2001) presents "The Theory of Effectual Reasoning". Effectual reasoning is the opposite of causal reasoning. Effectual reasoning starts with the means available, whereas casual reasoning starts with a predetermined target (Sarasvathy & Read, 2005). The theory builds upon the idea that the future is unpredictable. Therefore, entrepreneurs should focus on the resources available instead of defining a plan to achieve preset goals. "The Theory of Effectual Reasoning" understands the goal as unpredictable when engaging in entrepreneurial action. The end target will change according to the actions taken. This implies that the opportunities and the market are formed through the process itself. This differs from causation, where the opportunity initially identified determines the end-product (Spellman & Mandel, 2006).

The logic of effectuation builds upon five principles:

1. **Bird-in-hand Principle:** In order to create a new venture, entrepreneurs start by defining their means: *who am I, what do I know, whom do I know*. Further, they set their goals based on these three elements.
2. **Pilot-in-the-plane Principle:** Focusing on activities within one's control will result in good outcomes. The future is created on the way, rather than predicted in advance.
3. **Lemonade Principle:** Negative surprises and mistakes should be used to search for new opportunities. This is more meaningful than predicting worst-case scenarios and deal with them based on "what-if" scenarios.
4. **Affordable Loss Principle:** Entrepreneurs should set goals that are not exceeding the loss they can afford. This limit should be set at each step of the way when creating a venture.
5. **Crazy Quilt Principle:** When entering new partnerships, uncertainty is reduced and can provide new resources and directions for business development.

Entrepreneurs believe in a yet-to-be-made future. By thinking effectually, entrepreneurs realize that the future can be formed by human action. Therefore, it is much more comprehensive to understand the people and resources around and how to use them, than starting by predicting the future (Sarasvathy, 2001).

2.4 Intrinsic and Extrinsic Motivation

Motivation behind entrepreneurship is commonly split into extrinsic and intrinsic motivation (Antonioli, Nicolli, Ramaciotti, & Rizzo, 2016). Intrinsic motivation refers to internal factors and intangible incentives, for example self-determination, the ability to be creative or to be challenged by exciting work tasks. Extrinsic motivations centers on external factors such as monetary profit or recognition from the society.

Research suggests that the intrinsic and extrinsic motivations of an individual are influenced by the circumstances (Gelderen, et al., 2008). Factors such as social norms, working environment and attitudes towards activities could enhance or hinder motivations for engaging in a particular task. Furthermore, it is suggested that whether an entrepreneur is mainly intrinsically or extrinsically motivated depends on his or her intentions of starting a growth-oriented or an independence-oriented business (Douglas, 2013). A part of the planning process when starting a new business, is the decision of whether to create a growth- or independent-

oriented firm. Whether the intentions are mainly focused on growth or independence, depends on the entrepreneur's attitudes, means and abilities (Douglas, 2013). Growth-oriented entrepreneurs aim to maximize profit and seek to raise enough capital to expand the business. Independence-oriented entrepreneurs are mainly intrinsically motivated by being able to control their own job situation in order to live a specific lifestyle (Douglas, 2013). Further, it is argued that growth-oriented entrepreneurs are likely to contribute more to the society as they raise more capital and profit. Independence-oriented firms are likely to obtain a scarcer value for social welfare as the capital raised within the venture only is enough to keep the venture going.

2.5 Entrepreneur Out of Opportunity or Out of Necessity

Literature distinguish between the entrepreneurs who engage in entrepreneurship out of opportunity and those who engage out of necessity. Opportunity entrepreneurs become entrepreneurs because they view entrepreneurship as an appealing or inspiring option (Fairlie & Fossen, 2018). On the other hand, necessity entrepreneurs decide to start a business because other options are limited. Further, it is argued that opportunity entrepreneurs are likely to be more motivated by growth than necessity entrepreneurs (Douglas, 2013). Hence, opportunity entrepreneurs are expected to earn more because of higher human and social capital investments before becoming self-employed (Baron, 2006). Such entrepreneurs are more prepared, and hence more capable of identifying opportunities and exploiting them efficiently.

Supply and demand factors are also argued to influence entrepreneurial motivations. An outward shift in the demand of available capital for the products or services provided by entrepreneurs could enhance the opportunities to engage in entrepreneurship (Fairlie & Fossen, 2018). Thus, the number of entrepreneurs out of opportunity is likely to increase. Likewise, an inward shift in demand for wage could lead to more necessity entrepreneurs, as their opportunities in the market would decline.

2.6 Culture Influencing Entrepreneurial Motivation

There is a considerable amount of research literature discussing the role of culture when exploring what motivates entrepreneurs. Most literature acknowledge that cultural norms and beliefs have an impact on the formation of entrepreneurial motivations. However, the question

raises as to whether it is possible to identify universal reasons for engaging in entrepreneurship that are valid regardless of culture (Abbey, 2002). Hofstede (1984) defines culture as a set of shared values, beliefs and expected behaviours. Furthermore, Hofstede (1984) suggest four dimensions forming the culture of a nation; (1) Power Distance, (2) Uncertainty Avoidance, (3) Individualism/Collectivism and (4) Masculinity. In a study conducted by Abbey (2002), examining the differences of motivations between Ghanaian and American entrepreneurs, it was found that Ghanaian entrepreneurs were clearly more group-focused than the individual-focused American entrepreneurs. This is consistent to Hofstede's cultural model, classifying USA as the most individualistic country in the world, while Ghana is characterized as strongly collective-oriented (Hofstede & Bond, 1984). The study suggests that the distinction between different entrepreneurial motivation types are rooted in this cultural distinction. On the other hand, the objective of being independent and the desire to control one owns work-situation are argued to be universal motivations for engaging in entrepreneurship.

Researchers argue that the economic and institutional context of the country also influence entrepreneurial motivation (Hayton, George, & Zahra, 2002). Hayton et al. (2002) presents the model of "Culture's Association with Entrepreneurship", which points out four individual factors and two societal factors forming entrepreneurship. The individual factors are; (1) Cultural Values, (2) Cognition, (3) Needs and Motives and (4) Believes and Behaviours. These are put in context to the social factors; (1) Institutional Context and (2) Economic Context. Hence, entrepreneurial activity is dependent on available capital, infrastructure and economic growth.

2.7 Commercial Entrepreneurs and Social Entrepreneurs

One can draw distinctions between types of entrepreneurs and what motivates them to engage in entrepreneurship. Commercial entrepreneurship refers to "common entrepreneurship" – identifying, evaluating and exploiting opportunities (Shapiro & Sokol, 1982). This type of entrepreneurship is usually linked to individualistic behaviour and personal gains, of which monetary rewards is the main motivation. Social entrepreneurship links entrepreneurship to social value creation. Hence, the main motivation of social entrepreneurs is to positively contribute to society, aiming to satisfy societal requirements (Boluk & Mottiar, 2014) . Further, the social entrepreneur is commonly viewed as a heroic human being (Aileen Boluk & Mottiar, 2014). However, it is argued that the distinction of profit versus collective motives

is too limited. Social entrepreneurs may be motivated by a much broader specter of factors than lifting societal and environmental standards. Like commercial entrepreneurs, living a certain lifestyle, receiving acknowledgement from the public and gaining profit, seem to be important influential factors to form the intentions of social entrepreneurs. For example, engaging in social value creating activities or cooperating with green organizations may increase a firm's reputation. This could establish beneficial network effects and market opportunities.

2.8 Four Categories of Entrepreneurial Motivation

In the research paper GetGiveMakeLive (GGML), the creators of the Lean Business Platform seek to explore the *why* of entrepreneurship. Following a grounded theory approach, GGML examines the entrepreneurial motivation of 776 entrepreneurial projects. The study is based on the Normative Model of Entrepreneurship (NME) and a digital laboratory test environment (NME-TE). The NME-TE is a web-based platform that provides a business planning tool to support entrepreneurs in the starting phase of the business creation.

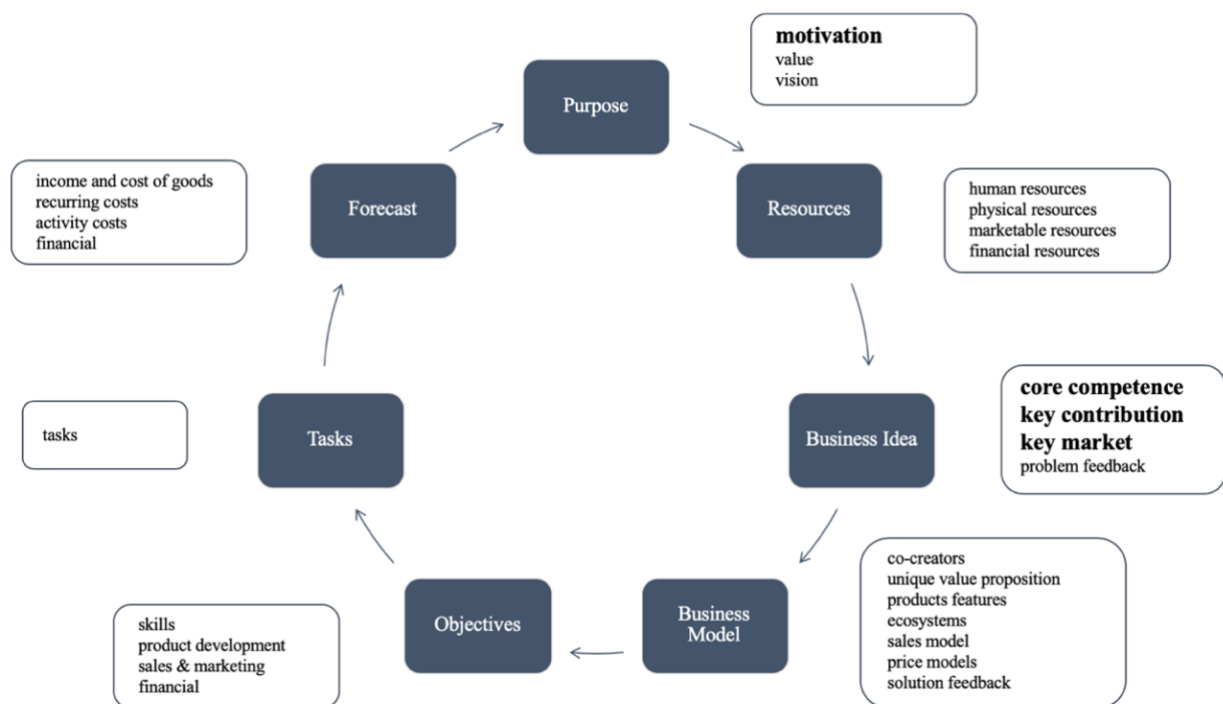


Figure 1 The Normative Model of Entrepreneurship (NME)

The NME-model is constructed by 7 steps and 27 elements. The elements bolded in Figure 1 were the ones explored in the GGML research paper. Using the NME-TE platform, all entrepreneurs involved in a case or start-up project could fill out one or several cards explaining their thoughts and perceptions of each element.

From the total of 14,000 who have used the NME-TE, the 776 individuals participating in the GGML study were sampled into three diverse cohorts of entrepreneurial projects based on their participation in specific entrepreneurship programs (EEP's), their utilization of the NME-TE and their application to real-world entrepreneurial projects. The following cohorts were defined:

Technological Entrepreneurs – United Kingdom: The Tech Entrepreneurs consists of participants in the University College of London's educational technology incubator. The incubator provides business growth support and custom-made mentoring to small and medium sized enterprises in the education technology sector.

Art Entrepreneurs – Norway: The Art Entrepreneurs consists of individuals aiming to live of their talents. These entrepreneurs get access to good tools and gain insight into a practical and creative way to develop their venture and work in creative and cultural industries. This cohort comprise entrepreneurs working in industries like film, music, art and architecture.

Young South African Entrepreneurs – South Africa: This cohort includes entrepreneurs aged 18 to 35 with youth-owned businesses. These entrepreneurs participate in programs that offers improved operational processes and tools, access to business skills support, fit-to-purpose mentorship, financial and non-financial resources, and targeted market access. Their objective is to become suppliers to organizations in both private and public sector. These entrepreneurs have existing businesses that provide products and services in different supply chains.

In total, 776 entrepreneurial projects participated in the GGML study, and out of these, 609 entered motivation cards into the NME-TE. This led to a total count of 1,714 observed motivations. These observations were translated into English, coded, and eventually interpreted into the four categories of motivation: motivations to GET, motivations to GIVE, motivation to MAKE and motivations to LIVE. Descriptions of each category are presented below.

GET	The entrepreneurs' main motivation for engaging in entrepreneurship is to GET certain financial objectives in terms of revenue growth, return on investments or dividends. Thus, they are mainly motivated by external, extrinsic rewards.
GIVE	Entrepreneurs placed in the GIVE category are mainly concerned with social responsibility, expressing an idealistic origin of motivation. Hence, they are motivated by giving something to the society, like creating workplaces or providing products or services, lifting people's social standards.
MAKE	The MAKE category comprises the entrepreneurs expressing the ability of being creative and innovative as their main motivation. Intrinsic motivations from engaging in entrepreneurial activity because it is personally rewarding are their main objectives.
LIVE	Both entrepreneurs out of opportunity and entrepreneurs out of necessity are placed in the LIVE category. They pursue entrepreneurship in order to have the ability to be independent or control their own time. The cohort also include those who engage in entrepreneurship because they have limited options of making enough money to live.

Findings in the GetGiveMakeLive-study

What are the motivations and reasons that individuals engage in entrepreneurship?

Figure 2 shows how the population of entrepreneurial projects were distributed across the four main motivation types. The most common main motivation type on an absolute count basis was MAKE (33 %), while LIVE (15 %) was the least common motivation type amongst the entrepreneurial projects.

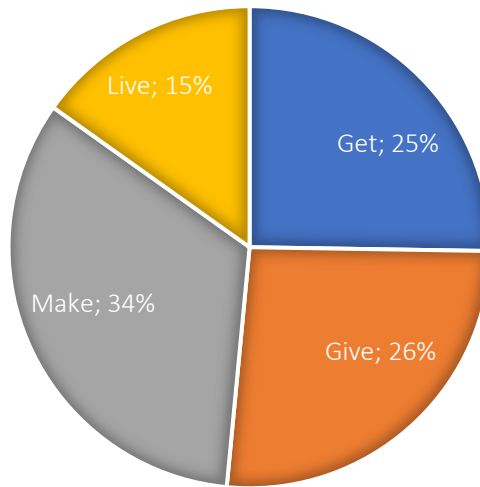
 MAIN MOTIVATION: GGML


Figure 2 Distribution of Population Amongst Four Objective Types (all GGML Participants)

Furthermore, 74 % of the sample entered more than one motivation card as the reason for their engagement in entrepreneurship. Additionally, 48 % of the sample entered more than one objective *type*. Interestingly, all 15 theoretically possible motivation type combinations were observed. The combinations of motivation types entered by this sample of entrepreneurial projects is presented are Figure 3.

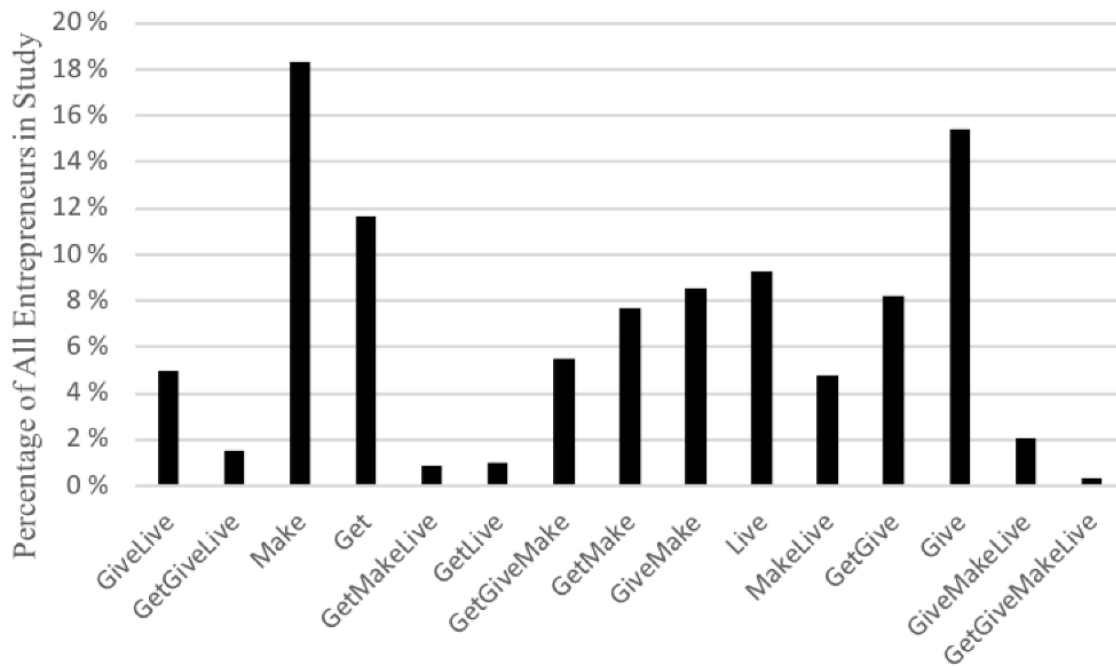


Figure 3 Combinations of Objective Types Observed (all GGML Participants)

How do these motivations and reasons vary between diverse cohorts of entrepreneurs?

Figure 4 displays the distribution of motivation type sorted by cohort. As illustrated, 56 % of the Art Entrepreneurs stated LIVE as their primary motivation for engaging in entrepreneurship. Meanwhile, only 13 % of the Tech Entrepreneurs and 6 % of the South African Entrepreneurs entered LIVE as their entrepreneurial motivation. Amongst the Young South African Entrepreneurs, 32 % stated GIVE as their main motivation. Thus, compared to the Art and Tech Entrepreneurs, GIVE seems to be more important for the South African Entrepreneurs.

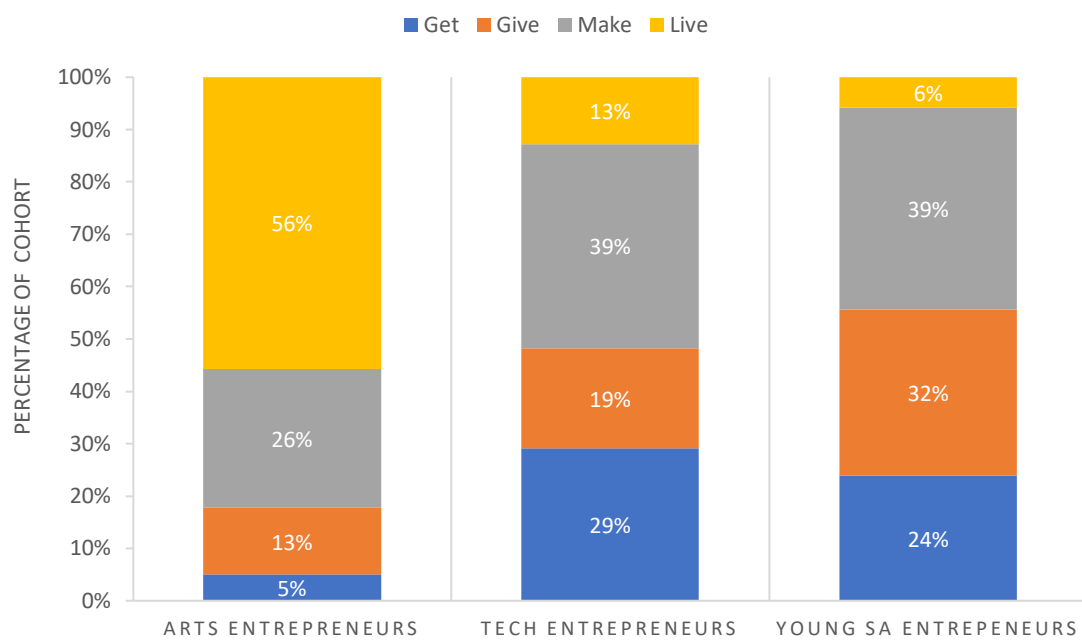


Figure 4 Absolute Count of Objective Types by Cohort (all GGML Participants)

3. Methodology

In this chapter, we will outline the methodical approach in order to answer our four research questions. First, the research design used for the analysis will be presented. Second, the population, sampling and questionnaire design are explained. Third, a brief description of the techniques used to analyze the data is given. Lastly, we assess the ethical concerns of the study.

3.1 Research Design

In order to address the research topic in a satisfactory manner, a proper research design is required. The research design is the overall plan of how the problem statement is intended to be answered. According to Saunders et al. (2016), choice of research design is dependent upon the problem statement and the purposes of the study. The purpose of this thesis was two-parted. First, we wished to examine the entrepreneurial motivation amongst distinct cohorts of entrepreneurs and assess if their classification of main motivation was consistent with their categorization in GGML. Second, we aimed to get a deeper understanding of *why* and *how* the entrepreneurial motivation changed. Thus, the first section of our study entailed a confirmatory analysis as we compared our results to the findings in the GGML research and checked for consistency. Furthermore, part two of our study was exploratory as we intended to examine why the deviations occurred, and possibly what caused the motivational change amongst our respondents. For this purpose, we used an exploratory design to seek new insights into a topic with limited research.

In order to answer the various parts of our analysis, a questionnaire was conducted and analyzed to (1) classify the motivation amongst different cohorts of entrepreneurs and further, to (2) reveal whether their entrepreneurial motivation had changed. A quantitative approach was therefore used to gather structured numerical data from a sample of the population. The intention of using a survey was to study the characteristics of our target population and to understand their attitudes, motives and opinions to the phenomenon of interest (Saunders et al., 2016). The strategy chosen was an electronic questionnaire developed in Qualtrics Survey Software, which enabled us to collect data from a large number of respondents. The focus was on gathering consumer data to explore different aspects of entrepreneurial motivation. This gave the study an inductive approach (Saunders et al., 2016).

Furthermore, since we neither had the time nor the resources available to perform a longitudinal study, the time horizon for our study classified as cross-sectional (Joshi, Kale, Chandel, & Pal, 2015). However, it should be mentioned that the data obtained in the GGML study was gathered over a time period of several years, whereas our data was collected during the limited time period of one month.

3.2 Target Population

Our target population equaled the modified sample of the GGML research paper and consisted of 753 entrepreneurs of which 124 were Art Entrepreneurs, 216 were Tech Entrepreneurs and 413 were Young South African Entrepreneurs. This population was initially selected from the total of 14,000 entrepreneurs whom had used the NME-TE related to it. Each cohort consisted of individuals whom had participated in distinct EEP's of which they were subject to the same content and training materials during their course. Additionally, the entrepreneurs within each cohort were similar in sectoral, social or cultural demographics. These sampling criteria assured homogeneity *within* each group of entrepreneurs as well as a meaningful degree of heterogeneity *between* the three different cohorts. Hence, the distinction between the three cohorts was mainly sectoral and geographical.

In early stages of our study, we received a list containing all email addresses linked to each entrepreneurial project participating in the GGML study. This list had already been aggregated and anonymized by the authors so that no data could be tracked back to a specific project or entrepreneur. In addition, all entrepreneurial projects were linked to unique case numbers, replacing the companies' names/case names. However, as some entrepreneurial projects belonged to several entrepreneurs, all individuals within the same project were assigned the same case number. Containing this exact link between the case numbers and projects was crucial for our study. Hence, we ensured adequate processing of the email list before we imported it to Qualtrics. First, we identified and removed duplicate emails from the list. Then, we checked all case numbers up against their respective email address to ensure accuracy. Lastly, the list containing both email addresses and case numbers was imported to Qualtrics. It should be pointed out that some entrepreneurs were accounted several times in the GGML study, either because they conducted several cases, or because they conducted equal case several times. Hence, we had to remove duplicates, and therefore our target population was slightly lower than the initial GGML population.

3.3 Design of the Questionnaire

In this section, the structure and the intention of each part in the questionnaire will be explained (see Appendix 1). The survey consisted of a total of 12 questions. All the respondents answered the same questions of which the majority of the questions had predefined response alternatives. Thus, the questionnaire was considered highly structured (Beech, 2014). To cover different aspects of the field of entrepreneurial motivation, the questionnaire was structured into four different sections respectively; (1) general information about the business, (2) classification of entrepreneurial motivation, (3) motivational change and (4) the effects of strategic orientation on entrepreneurial motivation. The last section regarding strategic orientation was not relevant for our analysis and will therefore be excluded in further elaboration of the questionnaire design. Although we did not include these findings as a part of our analysis, it was still a part of the questionnaire. Thus, we had to take into consideration that it may have affected the response rate of the survey.

3.3.1 General Information About the Business

First, we collected general information regarding the entrepreneur's business establishment and employment. For these two questions the respondents were asked to reply in text entry boxes, because predefined response alternatives would have been inexpedient given the variations in establishment year and number of employees amongst the entrepreneurs. The third and fourth question aimed to examine whether the entrepreneurs' businesses generated revenue, and if so, approximately how much. The last question in this section asked the respondents to indicate the extent to which they agreed that their financial performance was better than the performance of their main competitors. For this question, a seven-point Likert-scale ranging from "Strongly disagree" to "Strongly agree" was used to ensure a sufficient spectrum of choices for the participants to choose from (Bishop, 1987). Since the respondents had already been divided into three different cohorts of entrepreneurs, we decided not to include a question related to industry in our questionnaire. First, a predefined list of relevant industries for the respondents to choose from would have been unreasonably long and yet incomplete. Second, an incomplete list of predefined response alternatives would not have given us an accurate understanding of which industry the various entrepreneurs operated within.

3.3.2 Classification of Entrepreneurial Motivation

Second, we examined the entrepreneurs' motivation for starting their businesses. These questions were formulated based on a sketch received from the researchers behind the GGML study, and the predefined response alternatives linked to each question were therefore identical to the four motivation categories defined in the GGML research. As previously stated in our literature review, these four categories referred to different entrepreneurial motivation factors for starting a business:

1	To GET money or recognition above what is normal salary level when selling the company
2	To GIVE something to society rooted in my idealism or values
3	To experience the fulfillment of MAKING a unique product, service or organization
4	To LIVE a good life with a reasonable salary and a comfortable and independent work situation

In this section, we first asked the entrepreneurs to state their *main* motivation for starting their business. This question revealed which of the four motivation factors the respondent related to the most, and therefore, it provided us with an idea as to whether the respondent fundamentally was motivated by intrinsic or extrinsic motivation factors. Further, we asked the respondents to select an importance for each of the four motivational statements respectively. For these questions we listed response alternatives ranging from “Very important” to “Not important”. In addition, “Neutral” and “Choose not to answer” were offered as response alternatives to avoid false responses and prevent potential respondents from dropping out of the study at such early stage (Fisher, 1993). These questions revealed whether the entrepreneurs were motivated by several factors simultaneously, if their combination had a particular pattern, and in such case, if the particular pattern matched the rest of their profile. The last question asked the respondents to rank the importance of each motivational factor relatively. This was an important insight because it revealed more than just the importance of each factor individually; for instance, if an entrepreneur rated several

categories as “Very important” in the previous question, we would not have been able to reveal which of the motivational factors the respondent valued the most. In such cases, asking the respondent to rank each statement relatively enabled us to distinguish their importance. This part of the questionnaire was essential for answering part one of our research question, because our respondents’ classification of motivation served as a starting point for our comparison to the categorization in the GGML study.

3.3.3 Motivational Change

Third, we examined whether the entrepreneurs’ motivation had changed since the start-up. To reveal this, we first asked if the respondents had experienced any of the following factors since the start-up; (1) serious financial problems, (2) seriously practical challenges, (3) serious personal challenges or if they had (4) gotten new partnerships during the last years. If the entrepreneurs ticked off one or several alternatives, it could explain a change in motivation. The next question asked directly if the respondents’ motivation for developing their business had changed over the last years. If the answer was “Yes”, the last question in this section related to the actual change in motivation and asked if the respondent could describe what the change was due to. However, this question was made optional to prevent respondents that did not want to answer from dropping out of the survey. We hoped that the responses from this part of the survey would provide us with a deeper understanding of *why* and *how* the motivation varied between the three different cohorts of entrepreneurs. Additionally, the responses served as a contribution in revealing potentially deviations between the GGML research paper and our study. Thus, this part of the questionnaire was essential for answering both part one and part two of our thesis.

3.4 Preparation of the Dataset

After collecting enough responses for our survey, we exported the data into Excel to start analysing the results. First, however, we reviewed the entries in the dataset to remove any responses that could harm the reliability of our analyses. Fifty responses were registered as incomplete, and out of these, 46 were completely removed. The last 4 incomplete responses were retained as the only missing data was the last question regarding strategic orientation.

Thus, even though the responses were not finished, we still considered the recorded data as valuable for our analysis.

Furthermore, we prepared our dataset by removing outliers. More specific, we eliminated responses of which two entrepreneurs had stated their revenue higher than \$ 1,500,000. To hedge our analysis from potential errors we divided the firms' revenue by the number of employees to achieve an accurate preparation of the dataset. This was performed to ensure an even distribution of revenue per entrepreneur. Additionally, before conducting the analyses in Excel, we re-coded the answers for question 7 to 11 and 13 from text to numbers and codewords respectively.

Before conducting the analyses, we also imported the data linked to the *same sample of entrepreneurs* from the GGML dataset to our dataset. As mentioned in section 3.2, all email addresses were connected to unique case numbers before we distributed our questionnaire. These case numbers matched the respective case numbers composed by the authors of the GGML study. By linking all email addresses to their unique case number, we were able to select and import only the relevant data from the GGML dataset to ours.

3.5 Statistical Methods

To visualize the data retrieved from our questionnaire, descriptive statistics, pie charts, line charts and rankings were applied. As pie charts and line charts were applied to visualize the initial GGML findings, we decided to utilize the same methods in our analysis to obtain a sufficient representation of comparison between the two studies. Additionally, we conducted chi-square tests, t-tests and u-tests to check for significant results. All statistics were developed and analysed using Microsoft Excel.

Descriptive Statistic

To present the data retrieved in a manageable form, we used descriptive statistics to provide simple summaries of our sample and measurements. An overview of descriptive statistics related to the respondent's establishment year, number of employees and revenue is presented in the first part of our analysis.

Chi-square test

There are two types of chi-square tests: The test for goodness of fit and the test for independence. The goodness of fit test investigates whether observed values fit a specific distribution. The chi-square independence test checks whether two categorical variables are related. The test conditions are; (1) simple random sampling, (2) categorical variables and (3) the expected value of the number of sample observations of at least 5. In our study we used the goodness of fit test to explore the distribution of main motivation amongst the entrepreneurs. Further, we used the test for independence to check the relationship between type of study and types of motivations.

T-test

The t-test is used to check if there are significant differences between two groups. A paired test is used when the observations are paired, meaning each subject is measured twice. The t-test has four conditions; (1) continuous dependent variable, (2) independent observations, (3) normal distribution and (4) the dependent variable should not contain outliers. In our analysis we used a paired t-test to check if there were significant differences between the rating of motivation types amongst the different cohorts of entrepreneurs. This was appropriate for our study as the same entrepreneurs entered their rating of motivation for each motivation type.

U-test

The u-test is used to measure if two probabilities are equal. The test requires; (1) independent samples (2) simple random sampling and (3) relatively large numbers of n_1 and n_2 . In our analysis, we checked if the probability of experiencing different challenges was equal when entrepreneurs reported they had *not* experienced a change in motivation, and when they reported they *had* experienced a change in motivation.

3.6 Final Sample

Our final dataset consisted of 81 respondents of which 18 (22 %) were British Tech Entrepreneurs, 11 (14 %) were Norwegian Art Entrepreneurs and 52 were (64 %) Young South African Entrepreneurs. We did not consider this sample size to be sufficiently large to generalize our findings. However, we considered it sufficiently large for us to provide some preliminary answers as to whether the entrepreneurs' motivation had changed and what might possibly have caused this change.

3.7 Ethical Concerns

Saunders et al. (2016) define research ethics as “the standards of behavior that guide your conduct in relation to the rights of those who become the subject of your work or are affected by it” (p. 239). The questionnaire itself did not contain questions we considered sensitive. However, in part one, we asked for the respondents’ revenue in order to assess their socioeconomic position. Such information might have been perceived as sensitive by some respondents. To assure the privacy of our respondents, all results were held secured and confidential. Due to the purpose of our study, we were not able to anonymize the questionnaire because this would have prevented us from comparing our findings to the GGML study. However, as mentioned in the section 3.2, all data regarding the respondents had already been aggregated and anonymized by the authors behind the GGML research paper. Because our study constituted as an extension of this study, the Lean Business team were the ones responsible for handling our aggregated data in accordance to GDPR rules and guidelines. From the GGML study, we knew that the treatment of the data adhered to the GDPR rules, both with regard to the Data Processor and with regard to the Data Controller. Additionally, our sample of entrepreneurs had already been informed via the NME-TE’s terms of use and privacy policy that the company owning and operating the NME-TE might share their data for research and academic studies. Our respondents had accepted the use of their data for research purposes, understanding that they could revoke their permission on a “case by case basis”, and that all published data would be anonymized and aggregated.

4. Survey Results and Findings

In this chapter, the results extracted from the questionnaire will systematically be presented. First, the descriptive statistics regarding general information about the businesses will be presented. Second, we examine the entrepreneurial motivation amongst our respondents. For this purpose, the findings from part two of the questionnaire are outlined. Further, alongside the findings from the third part of our questionnaire, an assessment of the entrepreneur's motivational change follows.

4.1 Descriptive Statistics

4.1.1 Year of Establishment

The year of establishment in our sample ranged over a 29-year period, from 1990 to 2019. Most of the businesses in our sample were established in 2015, whereas the average business was established in 2013. Thus, our sample was relatively homogenous with regards to operational lifetime. As we did not use the age of the business as a direct variable in our analysis, we decided not to exclude the most remarkable outliers from our dataset.

<i>Year of Establishment</i>	
Mean	2013,44444
Standard Error	0,49566018
Median	2015
Mode	2015
Standard Deviation	4,4609416
Sample Variance	19,9
Kurtosis	9,71282789
Skewness	-2,57617364
Range	29
Minimum	1990
Maximum	2019
Sum	163089
Count	81

Table 1 Descriptive Statistics of Business Establishment (Our Study)

4.1.2 Number of Employees

The number of employees in our sample differed from 0, implying sole proprietorship, to 375. The average number of employees was approximately 10. We expected the average number of employees to be low as most businesses in our sample were small ventures. This assumption matched our findings which revealed that most entrepreneurs had between 1 and 10 employees.

<i>Number of Employees</i>	
Mean	10,11111111
Standard Error	4,768110374
Median	3
Mode	1
Standard Deviation	42,91299337
Sample Variance	1841,525
Kurtosis	67,5949341
Skewness	8,007628881
Range	375
Minimum	0
Maximum	375
Sum	819
Count	81

Table 2 Descriptive statistics of Number of Employees (Our Study)

4.1.3 Revenue per Employee

To ensure an accurate preparation of the dataset, we divided the respondent's revenue on the number of employees before conducting the analysis. As Table 3 shows, the average revenue generated per employee equalled \$ 15,277 in 2018. Twenty-nine respondents entered "No" when asked if their business generated revenue. This implies that only 52 out of 81 entrepreneurs in fact did. The majority of entrepreneurs reported either "No Revenue" (29 respondents) or revenue less than \$ 10,000 (25 respondents). This was somewhat expected due to their small scope in size and operational lifetime.

<i>Generated Revenue per Employee in 2018 (Total Count)</i>	
Mean	15277,28637
Standard Error	3723,39715
Median	2414,9
Mode	0
Standard Deviation	33510,57435
Sample Variance	1122958593
Kurtosis	16,26068023
Skewness	3,853878697
Range	200000
Minimum	0
Maximum	200000
Sum	1237460,196
Count	81

Table 3 Descriptive Statistics of Revenue per Employee Generated in 2018 (Our Study)

4.1.4 Financial Performance

Question 5 in our survey asked the respondents to enter the extent to which their financial performance is better than their main competitors. For this question a seven-point Likert scale was used (1 = Strongly Disagree, 7 = Strongly Agree).

<i>“Our Financial Performance is Better Than the Performance of Our Main Competitors”</i>	
Mean	3,617283951
Standard Error	0,21770967
Median	4
Mode	4
Standard Deviation	1,959387029
Sample Variance	3,839197531
Kurtosis	-1,174935033
Skewness	0,146826273
Range	6
Minimum	1
Maximum	7
Sum	293
Count	81

Table 4 Financial Performance Relative to Main Competitors (Our Study)

As the descriptive statistics show, the respondents average rating of their relative financial performance was 3,6. Hence, most entrepreneurs entered “Neither agree nor disagree” when asked to classify their financial performance compared to their main competitors. This result was not surprising as one of the consequences when using a Likert-scale may be that the respondents tend towards the middle option. Nevertheless, we will not eliminate the possibility that most respondents in fact were not certain of their financial performance relative to their competitors.

4.2 RQ1: Classification of Entrepreneurial Motivation

4.2.1 Main Motivation

RQ1a How do entrepreneurs classify their main motivation for engaging in entrepreneurship?

Main Motivation in Our Thesis

This part of our analysis outlines the findings of our respondents’ main motivation for engaging in entrepreneurship. In our questionnaire, all entrepreneurs were asked to state their main motivation as either GET, GIVE, MAKE or LIVE. Figure 5 shows the distribution across the listed motivation categories.

MAIN MOTIVATION: OUR STUDY

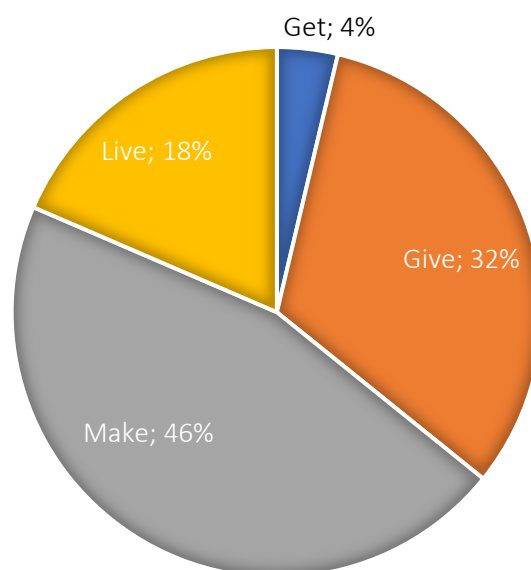


Figure 5 Distribution of Population Across the Four Motivation Types (Our Study)

As illustrated in Figure 5, our sample was dominated by entrepreneurs whose main motivation was MAKE (46 %). According to the GGML typology, this may imply that creating new products and unfolding one owns potential greatly influences our entrepreneurs' intentions. Furthermore, the low count of GET (4 %) may imply that generating monetary rewards was not a primary concern for most of the respondents. To check if the proportions of motivation types were significantly different from each other, we performed a chi-square test (see Appendix 2). The test revealed strong significant difference in the distribution of the four motivation types.

Figure 6 illustrates the main motivation type by cohort in our research.

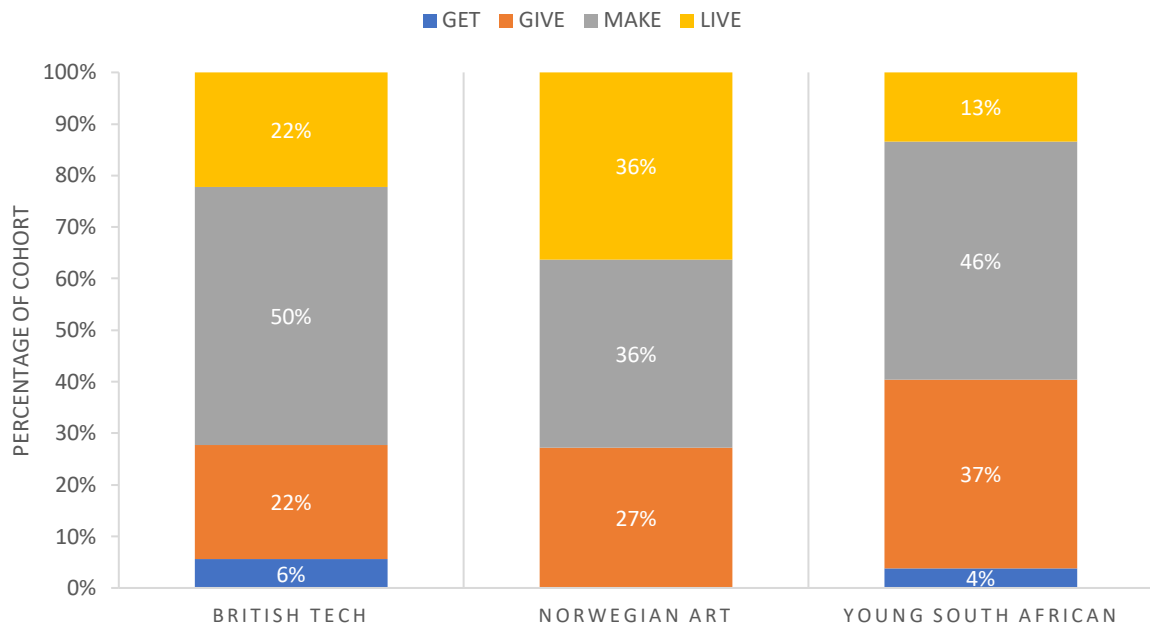


Figure 6 Objective Type by Cohort (Our Study)

Figure 6 shows that Art Entrepreneurs were more engaged in entrepreneurship in order to LIVE than any other cohort. Hence, the ability to work independently and control one's own time is highly sought for this cohort of entrepreneurs. Most Tech Entrepreneurs stated MAKE as their primary motivation category. This indicates that the majority of respondents within this cohort of entrepreneurs greatly concern about being innovative and challenged through work tasks. Furthermore, the Young South African Entrepreneurs is more concerned with social responsibility than any other cohort. This was reflected by the relatively high percentage of South African Entrepreneurs classifying their main motivation as GIVE. Lastly, GET was the least common motivation regardless of cohort.

Main Motivation in GGML

In Figure 7, the distribution of main motivation amongst the sample of GGML representatives is visualized.

MAIN MOTIVATION: GGML STUDY

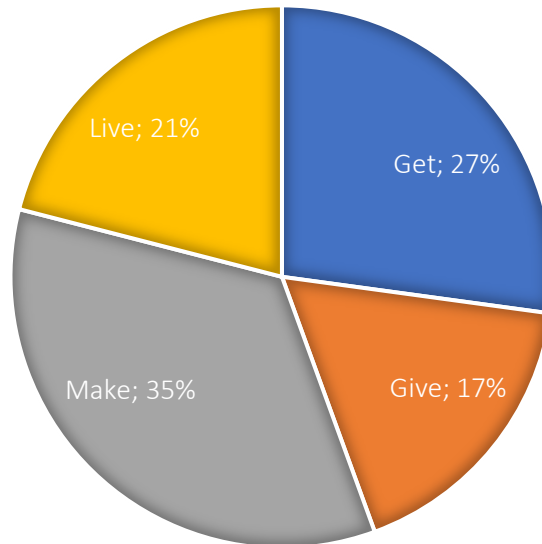


Figure 7 Distribution of Entrepreneurs³ Amongst the Four Motivation Types (from the GGML Research Paper)

The most observed motivation category amongst the GGML representatives was MAKE (35 %) while GIVE (21 %) was the least common main motivation type. Overall, the GGML respondents were relatively equally distributed across the four motivation types. When performing a chi-square test (see Appendix 2), we found no significant difference in the distribution of main motivations. Compared to the findings in our study, this served as a contrary. Nevertheless, MAKE was the most common motivation type in both studies, implying that creativeness and innovativeness is highly valued by the majority of entrepreneurs regardless of research. The most prominent difference was that 27 % of the entrepreneurs were placed in the GET category in GGML, while only 4 % were placed in the same category in our study.

³ The GGML sample equaled 81 entrepreneurs

Figure 8 illustrates the main motivation by cohort in the GGML study.

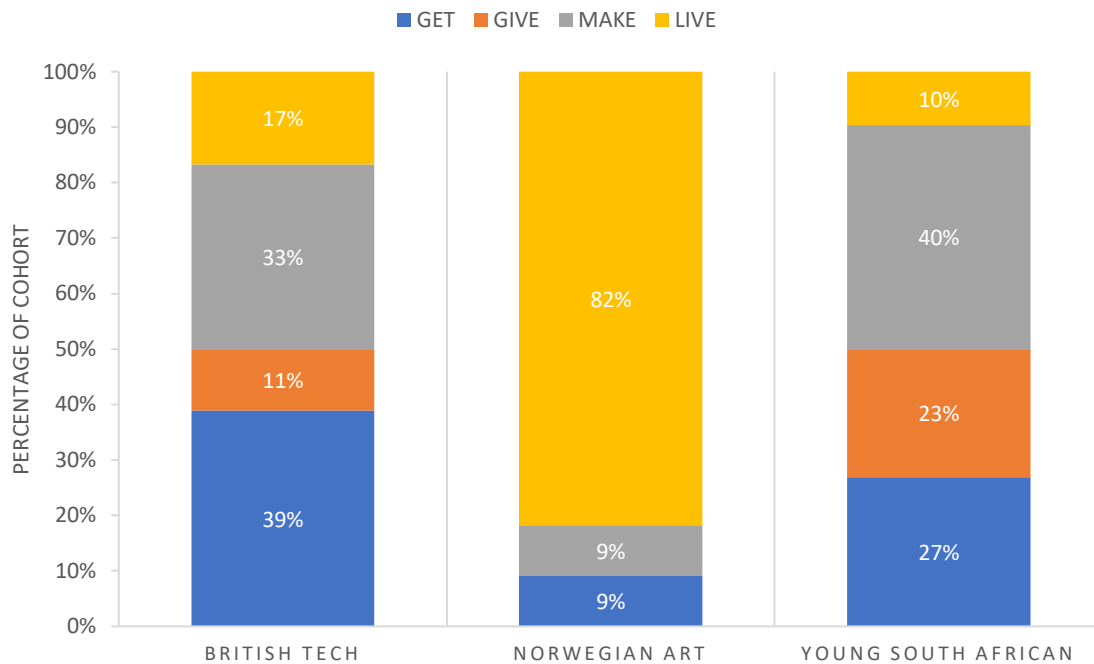


Figure 8 Main Motivation Type by Cohort⁴ (from the GGML Research Paper)

MAKE was the primary motivation type for South African Entrepreneurs. The Norwegian Art Entrepreneurs, however, were mainly motivated by LIVE. GET was defined as the main motivation for approximately one third of the South African Entrepreneurs. Additionally, close to 40 % of the British Tech Entrepreneurs stated their main motivation as GET. Relative to our study, this implies that a higher number of entrepreneurs justified their engagement in entrepreneurship to achieve certain financial objectives in terms of external, extrinsic awards in the GGML study.

It is important to stress that our analysis only illustrate the percentage distribution of entrepreneurs across each motivation type on an *overall* level. Even though we examine the entrepreneurial motivation on cohort level, our analyses do not visualize whether the distribution of entrepreneurs across the motivation types comprise the exact same sample of respondents. Hence, the percentage distribution of motivation type might be equal in the two studies even though the sample of entrepreneurs stating each motivation type is different.

⁴ The GGML cohort samples consisted of 18, 11 and 52 entrepreneurs respectively

Comparing Classification of Main Motivation

The findings from our analysis revealed that there was an appreciable deviation in the entrepreneurs' classification of main motivation between the GGML research and our study. To illuminate these deviations, Table 5 summarizes the respondents' classification of main motivation in both the GGML paper and in our study.

		Cohort Type				Total
		GET	GIVE	MAKE	LIVE	
Our Thesis	Tech Entrepreneurs	1 (6 %)	4 (22 %)	9 (50 %)	4 (22 %)	18 (100 %)
	Art Entrepreneurs	0 (0 %)	3 (27 %)	4 (36 %)	4 (36 %)	11 (100 %)
	Young SA Entrepreneurs	2 (4 %)	19 (37 %)	24 (46 %)	7 (13 %)	52 (100 %)
	All Cohorts	3 (4 %)	26 (32 %)	37 (46 %)	15 (19 %)	81 (100 %)
GGML Study	Tech Entrepreneurs	7 (39 %)	2 (11 %)	6 (33 %)	3 (17 %)	18 (100 %)
	Art Entrepreneurs	1 (9 %)	0 (0 %)	1 (9 %)	9 (82 %)	11 (100 %)
	Young SA Entrepreneurs	14 (27 %)	12 (23 %)	21 (40 %)	5 (10 %)	52 (100 %)
	All Cohorts	22 (27 %)	14 (17 %)	28 (35 %)	17 (21 %)	81 (100 %)

Table 5 Cross-tabulation of Classification of Main Motivation (Our Study versus GGML)

As our previous analyses only assessed the motivational change on cohort level, we find it interesting to further analyze the change on an individual level. However, as we did not know whether the entrepreneurs responding to our survey were the same ones as those entering the cards in the initial NME-TE, the level of analysis has to be the entrepreneurial project or the case – not the individual entrepreneur.

Compared to the findings in the GGML study, our case-analysis reveals that only 26 out of the total 81 classifications (32 % out of 100 %) matches in total. Amongst the 18 British Tech Entrepreneurs, only 8 respondents stated the same main motivation in the two studies. Furthermore, only 3 out of 11 classifications matched for the Norwegian Art Entrepreneurs. Lastly, only 15 out of 52 Young South African Entrepreneurs listed the same main motivation category in our study as they were assigned in the GGML paper. Hence, Tech Entrepreneurs had the highest match in classification of main motivation between the two studies (44 %), while Art Entrepreneurs had the lowest match rate (27%). Although these findings are interesting, we must consider the fact that we were not able to identify which entrepreneur entered which card in the initial GGML study. Therefore, we cannot draw certain conclusion about the reported change of the respondents' classification of motivation.

However, our overall findings revealed a clear deviation in classification of main motivation between the two studies. Due to this distinction, we found it appropriate to test if the deviation was significant. In order to do so, we performed a chi-square test (see Appendix 3). The test revealed a significant difference of the classifications of motivation types in the two studies. Ideally, we would perform a chi-square test to check if the classification of main motivation between each cohort were significantly different. However, due to the limited number of responses within each cohort, this test would not have given trustworthy results.

4.2.2 Evaluation of Motivation

RQ1b How do entrepreneurs evaluate the importance of different types of motivation?

Further on, we examined the evaluated importance of the four motivation categories. In the questionnaire, the respondents were asked to rate the importance of each motivation type from “Not important” to “Very important”. These ratings enabled us to check for consistency between the entrepreneurs listed main motivation and their rating of importance for each motivation category independently.

When analyzing the data from our survey, we found that all Tech Entrepreneurs rated their stated main motivation category as “Very important”. Furthermore, all Art Entrepreneurs except from two rated their main motivational factor as “Very important”. The remaining two ticked off “Important” when asked to rate the importance of the same motivation type as their stated main motivation. Interestingly, the same individuals simultaneously rated another motivation factor as “Very important”. This could imply inconsistency in some of the responses obtained from the questionnaire. In regard to the Young South African Entrepreneurs, our findings revealed that all respondents ticked off “Very important” or “Important” when rating the importance of their main motivation factor. The ones ticking off “Important” did, however, not rate any of the other factors as more important. Hence, these findings matched well with the respondent’s respectively stated main motivation.

Furthermore, by coding the response alternatives on a scale from 1 to 5 (1 = “Not important”, 5 = “Very important”), we were able to calculate the average rating of each motivation type independently. Table 6 shows the average rating of motivation type by cohort.

	Average Rating			
	GET	GIVE	MAKE	LIVE
Tech Entrepreneurs	2,83	5,39	4,61	4,06
Art Entrepreneurs	1,91	3,64	4,36	4,36
Young SA Entrepreneurs	2,96	4,78	4,69	3,75
All Cohorts	2,78	4,54	4,63	3,90

Table 6 Average Rating of Motivation Type by Cohort

Based on the average rating of all entrepreneurs, the highest rated motivation category was MAKE. Art Entrepreneurs stood out as the cohort with lowest overall rating of each motivation type. To check if the average rating of the motivation types were significantly different, we performed a t-test for all possible combinations (see Appendix 4). More specifically, we performed paired t-tests as the data analyzed was obtained from the same sample. The results revealed that all average ratings were significantly different from each other, except for the average rating of GIVE and MAKE.

4.3 RQ2: Motivational Change

4.3.1 Factors Determining Motivational Change

RQ2 Which factors may influence motivational change amongst entrepreneurs?

Drivers of Motivational Change

In this section, we examine potential factors that may influence the respondents' entrepreneurial motivation. According to Sarasvathy's (2001) "Theory of Effectuation", the end target of entrepreneurship may change along the way. Saravathy argues that a change in circumstances, market opportunities or available resources might change the end goal of a business. Based on this assumption, one could argue that a change in end goal would influence entrepreneurial motivation. Hence, we found it interesting to investigate if unforeseen challenges might have enforced a change in motivation amongst our entrepreneurs. In our questionnaire, we asked our respondents whether they had experienced serious financial

problems, serious practical problems in the development of the business, serious personal challenges or gotten new partners with somewhat different perspectives since the start-up. These factors were based upon our literature review and the assumption that they might impact entrepreneurial motivation. With the intent of making the analysis less complex, we replaced the text sentences with shorter code words for each of the five statements when preparing the dataset. Figure 9 illustrates the distribution of factors that may influence motivational change.

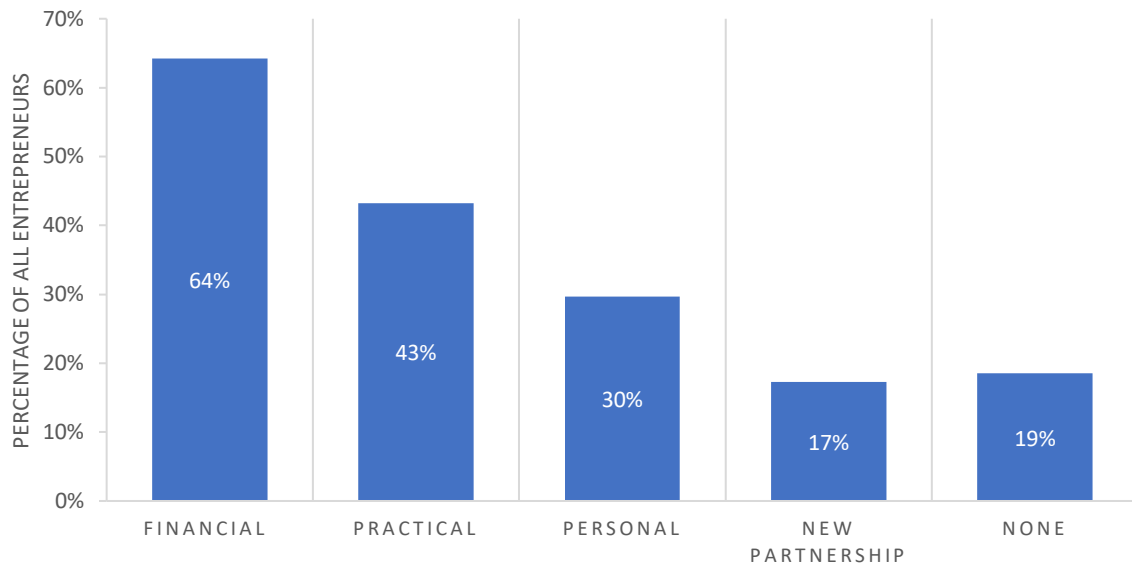


Figure 9 Factors Potentially Affecting the Entrepreneur's Motivation for Developing their Businesses (Distributed Across All Entrepreneurs in Our Study)

As Figure 9 shows, all of the above listed factors were represented. However, financial and practical challenges were the most frequently observed factors. Thirty percent of all respondents had experienced serious personal challenges since the start-up while 17 % had gotten new partners with somewhat different perspectives. Nevertheless, 15 respondents (19 %) stated that they had not experienced any of the challenging factors.

Furthermore, Figure 10 illustrates the distribution of factors across each cohort.

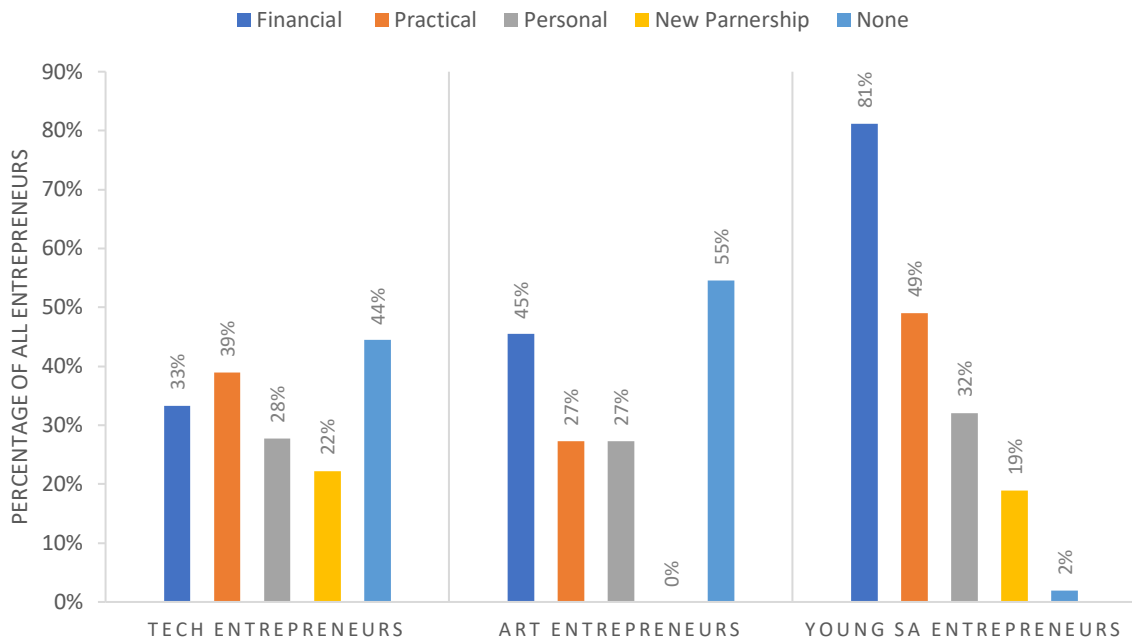


Figure 10 Factors Potentially Affecting the Entrepreneur's Motivation (Distributed Across the Three Cohorts in Our Study)

From the column of Tech Entrepreneurs, we notice that all factors were relatively equally distributed. Even though practical problems were reported by 39 % of the respondents, most of the entrepreneurs within this cohort stated that they had not experienced any of the listed factors. This observation also applies to the Art Entrepreneurs as a big share of these respondents stated that they had not experienced any of the challenging factors since the start-up. However, 45% of the Norwegian Art Entrepreneurs reported serious financial problems. From the far-right column, we observe that financial challenges also occurred amongst 81% of the South African Entrepreneurs. Furthermore, only 2% of these entrepreneurs reported that they had not experienced any of the factors. Hence, 96 % of all South African respondents stated that they had experienced either one or several of the listed factors since the start-up.

Factors Influencing Motivational Change

The establishment year amongst our sample of entrepreneurs ranged over a time period of 29 years – from 1990 to 2019. As our descriptive statistic illustrated, the average start-up year of our respondents was 2013. When asked if the motivation for developing their business had changed since their initial start-up, 36 respondents (44 %) answered “Yes” while 45 respondents (56 %) answered “No”. Based on this distinction, we find it interesting to compare

the distribution of motivational change-factors across cohorts in the two samples. Table 7 presents a cross tabulation of the percentage distribution of respondents entering whether they have experienced any of the listed factors.

		Factors Determining Motivational Change					
		n	Financial	Personal	Practical	New Partnership	None
YES: Have experienced a change in motivation	Tech Entrepreneurs	7	43 %	43 %	57 %	29 %	29 %
	Art Entrepreneurs	2	0 %	0 %	0 %	0 %	100 %
	Young SA Entrepreneurs	27	78 %	33 %	52 %	7 %	4 %
	<i>All Cohorts</i>	36	67 %	33 %	50 %	11 %	14 %
NO: Have not experienced a change in motivation	Tech Entrepreneurs	11	18 %	9 %	18 %	18 %	55 %
	Art Entrepreneurs	9	56 %	33 %	33 %	0 %	44 %
	Young SA Entrepreneurs	25	84 %	32 %	48 %	32 %	0 %
	<i>All Cohorts</i>	45	62 %	27 %	38 %	22 %	22 %

Table 7 Cross-Tabulation Presenting the Percentage Distribution Between each Cohort (Our Study)

As Table 7 shows, 7 Tech Entrepreneurs reported that they *had* experienced a change in motivation since the start-up. Amongst these respondents, 43 % specified both serious financial and personal challenges as occurring factors. Simultaneously, 57 % of the Tech Entrepreneurs stated that they had faced serious practical problems. In regard to the Young South African Entrepreneurs, 21 out of 27 respondents (78 %) reported financial problems, while 52 % reported practical problems in the development of the start-up.

When looking at the whole sample of entrepreneurs stating that their motivation for developing their business *had* changed, 67 % stated that they had experienced serious financial problems since the start-up. Furthermore, 33 % had faced serious personal challenges, while 50 % had faced serious practical problems in the development of the business. Interestingly, amongst the total of entrepreneurs reporting a change in motivation, 5 out of 36 respondents (14 %) reported that they had not faced any of the listed challenges. This implies that their motivational change could be due to other factors omitted from our response alternatives.

Amongst the entrepreneurs reporting that their motivation for developing their business had *not* changed, 28 respondents out of 45 in total (62 %) stated that they had experienced serious

financial problems. This percentage was higher than the one listed for the entrepreneurs who *had* experienced a change in motivation. However, the proportion of entrepreneurs reporting personal and practical challenges was less for the sample *not* reporting motivational change. When looking at the Art and Young South African cohorts independently, however, we found that the percentage of entrepreneurs stating that they had not faced any of the listed factors were lower for the sample *not* reporting a change in motivation. Simultaneously, the number of entrepreneurs facing financial, personal, practical and partnership challenges were higher. This paradox raises an interesting issue as to what caused the change of our entrepreneurs' motivation.

In order to test if there were significant differences between the “YES-group” and the “NO-group”, we performed a u-test of the proportions experiencing the different factors (see Appendix 5). The test revealed no significant differences between the two groups of any of the factors. Thus, we cannot suggest that any of the factors listed in our survey significantly influence motivational change.

Combinations of Factors

As the cross-tabulation does not account for the various combinations occurred in our dataset, we find it interesting to visualize the distribution of entrepreneurs with regard to these combinations. Hence, Figure 11 visualizes the 13 various combinations observed amongst all respondents in our study.

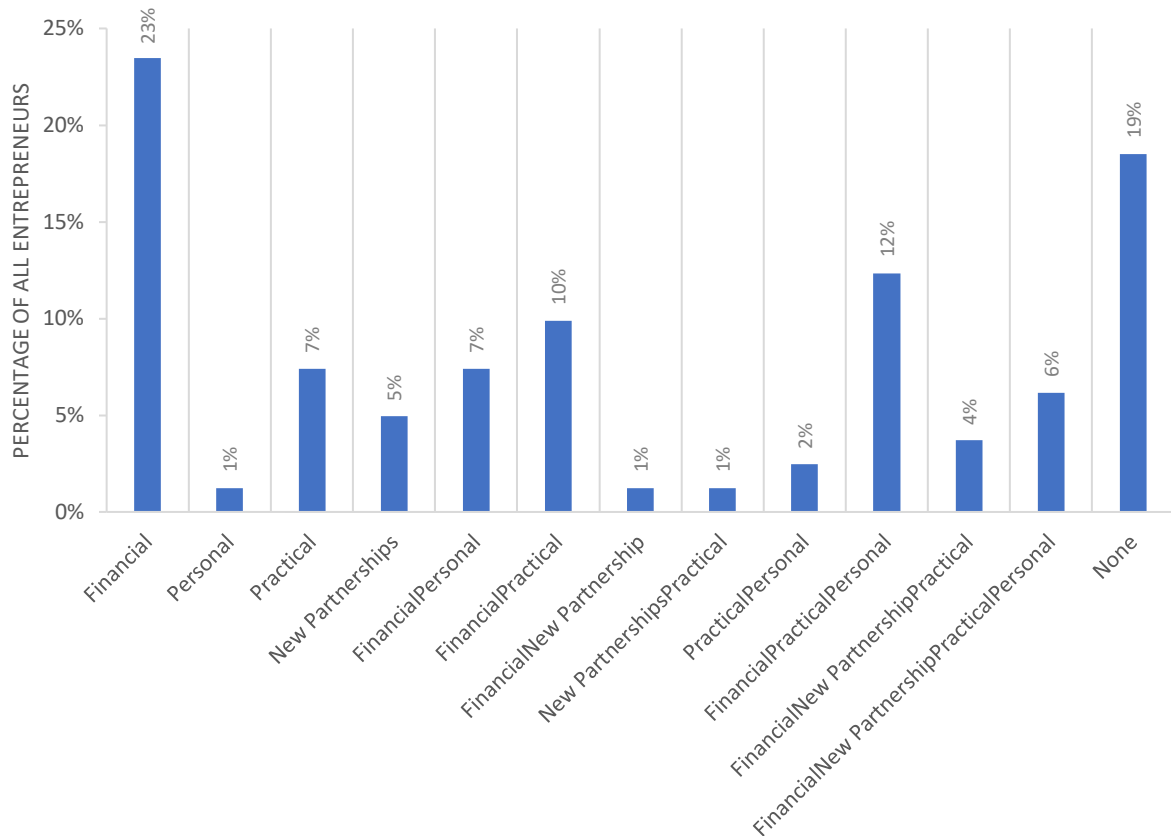


Figure 11 Combinations of Factors Observed amongst Our Population

Forty-four percent of our population stated that they had experienced more than one of the above listed factors since the start-up, whereas 22 % had experienced more than two. Twenty-three percent of all entrepreneurs reported serious financial problems as their exclusive challenge since the start-up. Few entrepreneurs had experienced serious personal challenges or gotten new partnerships exclusively without facing other factors simultaneously. Twelve percent of our population stated that they had experienced a combination of financial, practical and personal problems since the start-up. However, one interesting observation was that 19 % of our sample had not faced any of the listed factors.

5. Discussion of Results

Classification of Main Motivation

Our findings revealed that MAKE (46 %) was the most frequently stated main motivation amongst our respondents while GET (4 %) was the least stated main motivation. These findings strongly contradict to the perception of the entrepreneur as a profit seeking and individualistic human being. According to our findings, the fundamental reasons for engaging in entrepreneurship seem to be out of deeper character, centring on self-realisation, innovativeness and fulfilling one's ambitions. Based on the literature review, this indicate that intrinsic factors are more heavily weighted than extrinsic factors in the formation of motivation amongst our respondents. According to Douglas (2013), those entrepreneurs being intrinsically motivated are likely to be more independence-oriented than growth-oriented. Thus, our respondents, who are mainly working in small businesses, seem to be more concerned about living certain lifestyles and fulfilling their ambitions than expanding their businesses.

When comparing our findings to the findings in GGML, the main motivations in GGML were much more evenly distributed than in our study. This difference was found to be significant when performing a chi-square test. The most prominent distinction was the low percentage of GET (4 %) in our study compared to GGML (25 %). When comparing the two studies, it is crucial to consider the different methods utilized to categorize the respondents. Our study was based upon self-evaluation, as the respondents were asked to independently classify their motivation according to the predefined categories outlined in the survey. In GGML, the researchers categorized the respondents according to information given by the entrepreneurs in text responses. Due to the wording of each motivation type in the questionnaire, our respondents were highly exposed to Social Desirability Bias. This bias entails that the respondents reply what is favourably regarded by the society and underreport what is not favourably regarded (Krumpal, 2011). The term GET could easily be associated with greediness or selfish behaviour, causing the respondents to be highly cautious to label themselves within this category.

When considering each cohort separately, we found several distinctions between the three groups. The Art Entrepreneurs were clearly more driven by LIVE than any other cohort. This finding was not surprising as Art Entrepreneurs were topologized as those starting entrepreneurship in order to live a certain lifestyle and expressing their creative talents in the

initial GGML study. Art Entrepreneurs are commonly classified as necessity entrepreneurs (Bennett, 2009). This suggestion assumes that educational programmes designed to fulfil ambitions of becoming performers limit other work life opportunities. This finding corresponds well to the fact that none of the Art Entrepreneurs placed themselves in the GET category. This could imply that they do not aim to raise capital from engaging in entrepreneurship. Based on our literature review, one could suggest that they sacrifice their opportunities to generate considerable monetary profit in order to realize their creative ambitions. Further, this supports literature indicating that Art Entrepreneurs are mainly independence-oriented rather than growth-oriented (Antonioli, Nicolli, Ramaciotti, & Rizzo, 2016). One could also argue that in many creative environments, being concerned with earning profit is negatively perceived. An artist should express creativity for the sake of the art, not for commercial reasons. The social norms characterizing the art industry could therefore be an explanatory factor for the non-existing number of Art Entrepreneurs stating GET as their main motivation in our study.

The British Tech Entrepreneurs represented the cohort with the highest percentage of MAKE as their main motivation. This finding was expected as the technology industry is characterised by innovativeness and development of creative solutions (Alfredo & Vicente, 2008). However, we were surprised that GET was the least frequently occurring main motivation within this cohort. The technology sector could potentially provide great profitability for those who succeed. Therefore, this finding contradicts to research suggesting that increased chances of profit raise the number of opportunity entrepreneurs engaging in technological business creation in order to harvest the monetary benefits that might come from it (Fairlie & Fossen, 2018). Nevertheless, we must stress that in this part of our thesis, we investigated the *main* motivation exclusively. The entrepreneurs might have stated other motivation types as highly important, though not as their primary motivation.

Young South African Entrepreneurs stood out as the group with the highest percentage of GIVE. We find support to these findings in Hofstede's (1984) four dimensions of culture. South Africa could be characterised as a collective-oriented nation. Thus, we expected a high number of these entrepreneurs to engage in business creation in order to contribute to their local communities. The high frequency of GIVE indicate that the South African Entrepreneurs' motivations are more extensively linked to social entrepreneurship than to commercial entrepreneurship (Omoredede, 2014). Further, out of the three cohorts, South African Entrepreneurs had the lowest percentage of LIVE. This finding indicates that most of

the South African respondents do *not* engage in entrepreneurship in order to live a certain lifestyle or to fulfil their creative ambitions. One could argue that this could be due to the context and circumstances of their surroundings. As suggested by Davidsson (2003), prior knowledge and information are the fundamental factors of how opportunities are recognized by individuals. In developing countries, the capabilities to identify and exploit opportunities are scarce due to the lack of educational programs, institutions and capital (Nicolaidis, 2011).

The Rated Importance of Each Motivation Type

Our analysis revealed compliance between the entrepreneurs' stated main motivation and the individual ranking of motivation types. However, one of the Art Entrepreneurs rated his or her main motivation as "Neutral" while the remaining motivations were ranked as "Not important at all". This could either indicate random completion of the survey, or that the respondent did not find the motivation categories applicable to his or her perception of personal motivation. To explore if we could find any significant differences in the average rating of the motivation types, we performed paired t-tests. We found that all the average ratings of motivation types differed significantly from each other except from the difference between the rating of GIVE and MAKE. GET was both the least frequently occurring main motivation type as well as the overall lowest rated motivation type. Once again, we find support in literature suggesting that entrepreneurial motivation is formed by more fundamental factors than profit and monetary rewards.

Looking at the average rating of motivation types provided us with a broader picture of the complexity of entrepreneurial motivation. The results from our survey revealed that most entrepreneurs consider several motivations as important. Concerning mainly about one motivation type does not exclude concerning about several other types simultaneously. This supports literature arguing that one should be cautious to narrow definitions of what motivates entrepreneurs (Aileen Boluk & Mottiar, 2014). Regardless of distinctions between cultures, industries or type of businesses, entrepreneurs are likely to be motivated by a broad specter of motivations. For example, although a respondent stated LIVE as his or her main motivation, gaining profit, contributing to the community and creating innovative products might have been rated highly as well. Further, an entrepreneur classified as e.g. MAKE in the GGML study and GIVE in our study, does not necessarily imply that a shift in motivation has occurred. If both motivation types were rated as important, one could argue that even small

coincidences could lead to one of the types being stated over the other, depending on context and circumstances.

Factors Potentially Influencing Motivational Change

We found that serious financial problems were the most experienced challenge amongst the entrepreneurs. We were not surprised by this finding considering the short life span of most businesses in our study. This is supported by the argument of Marmer et al., (2011), claiming that most start-ups fail within the first years of establishment. However, our u-tests did not reveal any significant difference in the proportion of those stating they *had* changed their motivation *and* experienced financial challenges versus those stating they had *not* changed their motivation *but* experienced financial challenges. The same results were identified when performing u-tests for practical problems, personal challenges and new partnerships; the differences in proportion were not significant. In general, one could argue that such factors are likely to occur in any business during a relatively short time span. Hence, even if these challenges occurred amongst the majority of businesses in our study, we cannot fully conclude that they in fact influence motivational change.

Sarasvathy (2001) suggests that entrepreneurship is prone to uncertainty, and that the end target might change according to actions taken. Further, she suggests that the market and opportunities are formed along the way. Hence, one could argue that this uncertainty and shift in circumstances could naturally lead to a change in motivation as well. In our analysis we looked at different factors that may influence motivational change independently. According to Sarasvathy's (2001) theory, it might be necessary to look at diverse factors in context to each other and further, in coherence with circumstances of the business. However, even though our u-tests did not reveal any significant results, we cannot fully eliminate the possibility that the factors accounted for in our thesis in fact influence motivational change.

6. Limitations

This thesis faced several limitations which will further be elaborated in this section. First, the reliability of the study will be reviewed. Thereafter, the data validity will be examined. Lastly, the general limitation of our study will be presented.

6.1 Data Reliability

Reliability refers to the replication and consistency of the data in a study. Saunders et al. (2016) states that “if a researcher is able to replicate an earlier research design and achieve the same findings, then that research would be seen as being reliable” (p. 202). There are four possible errors or bias of the participants or the researchers which may affect the reliability: (1) participant error, (2) participant bias, (3) observer error and (4) observer bias.

First, *participant error* refers to factors that can alter the way in which the respondents perform. For example, respondents might misunderstand questions or take the survey at an inconvenient time, causing the answers to be biased. Our questionnaire was voluntary for those receiving it, and we had no control of the test situation. However, the respondents could choose to complete the survey at a convenient time within the timeframe of our study. To avoid errors in the participants, we conducted a pilot study on four people of different ages and employment statuses to test the understanding, response time and the simplicity of the survey. Based on the feedback, we made some adjustments to formulations and structure before distributing the final questionnaire.

In addition, including incentives for conducting the questionnaire may increase the participant error of the study. One inherent weakness when using incentives in questionnaires is that respondents may rush through the questions in order to enter the raffle. However, incentives are often needed to ensure enough responses. After the first and second distribution of our survey, our response rate was still pretty low. Therefore, in an attempt to increase the response rate, we included an incentive stating that all respondents answering the questionnaire will receive an executive summary of our findings after the study is completed. To increase the response rate, we also scheduled five reminder messages to the unfinished respondents.

Furthermore, a *participant bias* occurs if the respondents answer what they believe we want them to respond, providing a false response (Saunders et al., 2016). To reduce this bias, we

tried to keep our questions short and clear in order to avoid misunderstandings. Additionally, we tried to avoid leading questions by primarily including statements and asking the respondents to select one or the other. We also tried to make our survey more effective by adding a Likert-scale to some of the questions. For these questions, we chose a seven-point Likert scale to ensure a sufficient spectrum of choices for the participants to choose from, and further, to ensure accurate responses.

One of the more prevalent factors that may shape participant responses is the *social desirability bias*. Participants often want to present the best version of themselves, or a version that is socially acceptable. In an attempt to limit this bias, we assured the respondents that all answers were made secure and confidential. However, we were not able to make the questionnaire completely anonymous because this would have prevented us from comparing our results with the findings in the GGML study. By not doing the survey completely anonymous, the social desirability bias might have increased because of respondents answering what is considered politically correct instead of their own opinions (Saunders et al., 2016). Hence, we have to consider the possibility that some respondents might have responded inaccurately to avoid shedding bad light over their company.

The third threat to reliability, *observer error*, refers to any factors that alter the researchers' interpretation or induce bias in the researchers recording of the responses (Saunders et al., 2016). Because we collected online survey data, there was no occasion of misunderstanding the responses. To reduce the probability of observer bias, we designed the questionnaire with few open-ended questions. However, we decided to attach open entry text boxes to the questions regarding establishment year, number of employees and description of change in motivation. This was done because the specter of intervals included in predefined response alternatives would have been incomplete or unreasonable large.

Observer bias occurs if researchers incorrectly ascertain or records data from a participant in a study (Brown, 2010). As our data was imported to Excel and analyzed manually, we could not fully eliminate the possibility of manual errors in our study. We did, however, process and prepare our dataset with utmost cautiousness. This reduces the observer bias of our study.

Lastly, *internal reliability* refers to the interrelatedness amongst the measures (Saunders et al., 2016). Ideally, a calculation of Cronbach's alpha should be conducted to test the internal reliability of our study. However, this test can only be applied to multiple-question Likert-

scale surveys. As our questionnaire consisted of open-ended questions, Likert-questions, multiple-choice questions and rank-order questions, we were not able to perform the Cronbach's Alpha to test if our survey measured what it was intended to measure. Hence, without these calculations, we are not able to assess the internal reliability of our study.

6.2 Data Validity

The purpose of validity is to assess the degree of appropriateness of the measures used, the accuracy of the results and the generalizability of the findings (Saunders et al., 2016). Validity is separated into four types; (1) internal validity, (2) external validity, (3) construct validity and (4) statistical conclusion validity.

6.2.1 Internal Validity

Internal validity, called measurement validity for questionnaires, refers to the questionnaires ability to measure what it is intended to measure. Saunders et al. (2016) emphasize on six different threats to internal validity: history, instrumentation, testing, mortality, maturation and ambiguity about causal direction. Several factors served as threats to the internal validity of our study, namely instrumental threats, testing threat, mortality threats and maturation threats.

Instrumentation threat occurs when the test somehow changes between the pre-test and the post-test (Cook & Campbell, 1978). Our study should logically not suffer from instrumentation threat, as the difference between the pre-test and the test *was* the treatment. However, there is a chance that there are other divergences between the NME-TE motivation category assignment and our motivation category assignment. Furthermore, *testing threat* occurs when the participants cognitively reacts to taking the pre-test (Cook & Campbell, 1978). For instance, they may change their responses because they know what they are being tested on and can prepare for the post-test. The initial categorization of motivation amongst the participants in the GGML study was conducted by the researchers and not the entrepreneurs themselves. As a result, the respondents were not aware of their initial classification when asked to state their main motivation in our study. Hence, they could not prepare for the post-test, and this eliminates the testing threats in our study.

Mortality threats refer to respondents dropping out of the study (Saunders et al., 2016). Out of the total population of 753 entrepreneurs, 624 chose not to participate. Our study is therefore accompanied by a loss of information due to a large share of non-responses (Fink, 1995). These non-responses may introduce a bias error into our results because of the differences between the respondents and the rest of our sample. However, we received an acceptable response rate and adjusted our questionnaire after the pilot test. Hence, we argue that the non-responses are due to natural causes. Yet, 50 out of 129 respondents dropped out at different stages of the survey. This implies a dropout rate of 39 %. Although 4 out of these respondents were still included in our analysis, this drop-out rate was relatively high compared to our response rate. The majority of entrepreneurs left the survey after completing 24 %, at the point when asked about their financial performance. One possible reason for people leaving the survey at this point may be the perceived sensitivity of the question. The average completion rate amongst the respondents dropping out was 20 %. At this point the entrepreneurs were asked to enter their generated revenue in 2018. The average completion rate of 20 % strengthens the assumption that most entrepreneurs dropped out of the survey due to their perceived sensibility of the questions. Based on these facts, it is safe to argue that the mortality threat of our study is present.

Maturation threats might occur when respondents perceive the questionnaire to be too time-consuming (Saunders et al., 2016). This could lead to incomplete questionnaires or careless responding. In order to reduce maturation threats, our respondents were provided with an estimated completion time of the survey. Without affecting the quality of it, we tried to make the questionnaire as short as possible to ensure enough responses. The most time-consuming and tough question were placed at last because it was less relevant for our analysis. Thus, an increased fall out rate at this point of the questionnaire would have had less impact on the analysis. To ensure efficiency, we also tried to formulate clear questions and consistent response alternatives. However, since the majority of our respondents were English speaking, we designed our questionnaire in English. Hence, we have to consider the possibility that some respondents, especially those who are not native English speakers, might have misinterpreted the content of one or several questions. Consequently, difficulties in understanding the content might have led to careless responding or incomplete responses. This increase the maturation threat of our study.

Finally, the complexity with regard to the clarity of hitting the right respondents needs to be addressed. As each initial case could contain several entrepreneurs, we had no way of knowing

which of the motivation cards in the NME-TE was written by whom of the entrepreneurs linked to the specific case or entrepreneurial project. Our survey was sent out to a modified population of all entrepreneurs participating in the GGML research. Even though all participants were linked to unique case numbers initially, we could not identify whether the entrepreneur who responded to our survey was the same as the one entering the cards in the NME-TE. Thus, the individuals entering the motivation cards in the NME-TE may be different from the ones classifying their motivation in our study. This lack of knowledge certainly reduces the internal validity of our study.

6.2.2 External Validity

External validity is the extent to which the results of the study can be generalized to other contexts (Saunders et al., 2016). Threats to external validity occurs when the sample systematically differ from the population to which we want it to be generalised to. All our measurements were obtained from the same sample of entrepreneurs as participated in the GGML study. The initial sample of entrepreneurs consisted of 776 individual entrepreneurial projects from three diverse cohorts. Hence the relatively large section of entrepreneurs, the GGML study may be perceived as quite representative. As stressed in the reliability section, our final sample consisted of 81 entrepreneurs of which 18 were Tech Entrepreneurs, 11 were Art Entrepreneurs and 52 were Young South African Entrepreneurs. Considering this relatively small sample of entrepreneurs, we could not be sure that our results could be generalised to the initial population of Tech, Art and South African Entrepreneurs. Additionally, as our respondents had to select themselves for the survey a self-selection technique was used, and this might have decreased the external validity of our study.

To obtain a valid basis of comparison we linked unique case number to each email address in order to connect the results from both studies together. Before conducting the analysis, we used these case numbers to limit the GGML sample used for comparison in our research. More specific, we limited the GGML sample to the same 81 email addresses that responded to our study. In this way we could base our analysis upon the information from both the GGML study and ours, provided by the exact same entrepreneurial project. However, this limitation raises a set of biases for our study that needs to be addressed. The analyses conducted by the authors of the GGML study were based upon the answers given by entrepreneurial projects up to five years ago. Hence, it is a large chance that some projects do not longer exists or that the

remaining entrepreneurs are not as familiar with the NME-TE tool. If such, the individuals receiving our survey might not have felt sufficiently informed, motivated or obligated to answer. Additionally, there is a big likelihood that the entrepreneurs' business situation had changed between the first and second study, and thus, that these changes were in fact the reason for their diverse classification of motivation. As our initial target population was limited to the same participants as in the GGML research, the sampling procedure could not be manipulated. Hence, we face the possibility that a large share of our sample may no longer be representative for the population as a whole. This serves as a threat to the external validity as the results of our study possibly cannot be generalized to other contexts.

6.2.3 Construct Validity

In order to find out if our measurement questions in fact measures the construct we intend them to measure, we need to evaluate the construct validity of our research (Saunders et al., 2016). We will mainly focus on face validity and content validity in further elaboration. Nevertheless, we also stress the content-validity bias of our study.

Face and content validity are subjective considerations about whether the measures are likely to represent the theoretical background (Trochim, 2006; Drost, 2011). The listed questions in our survey were developed with the intent of measure entrepreneurial motivation and motivational change. As explained in section 3.3, each question was carefully selected. Before distributing the survey, the questionnaire was approved by Yngve Dahle, one of the developers behind Lean Business Canvas and the GGML study, as well as by professor Magne Supphellen. The questionnaire was designed with a degree of diversity to ensure that all aspects of the research questions were covered and answered extensively. Hence, we tried to cover all relevant parts of the subject we aim to measure. This strengthens the content validity of our study.

Entrepreneurial motivation as a construct cannot be directly observed. In our study we therefore used different measurements and indicators to identify which entrepreneur classified which motivation type, based on existing motivation categories defined by the GGML typology. Hence, our questionnaire was based on existing literature and formulated based on the results of the GGML paper. This strengthens the face validity of our study.

Nevertheless, the validity of the GGML typology should be questioned. The four motivation categories (GET, GIVE, MAKE, LIVE) were developed based on a coding scheme for which the GGML researchers believed all observations amongst the entrepreneurs had a good fit. However, as the total count of motivations observed in the GGML study was 1,713 (entered by 609 out of the total of 776 participants), it could be argued that the categories of motivation developed to fit all these observations are relatively wide. As a consequence, when asking our respondents to state one of these four categories as their main motivation, we face the possibility of excluding certain motives when measuring the entrepreneurial motivation amongst them. Hence, when basing our research upon the predefined categories of motivation, we must consider the likelihood that essential measurement motives of entrepreneurial motivation has been omitted. This assumption is certainly threatening the *construct validity* of our study.

Construct-Validity Bias

Furthermore, we limited our sample to entrepreneurs distributed across three cohorts exclusively. These cohorts were predefined by the researchers of the GGML study as British Tech Entrepreneurs, Norwegian Art Entrepreneurs and Young South African Entrepreneurs. Hence, our sample consisted of entrepreneurs originating from different nationalities. All entrepreneurs *within* each cohort were similar in regard to sectoral, social or cultural demographics. This implied dissimilarities of sectoral and geographical terms *between* the cohorts. When comparing data obtained from samples with different cultural backgrounds, *construct biases* may occur (He & Vijver, 2012). Construct bias indicates that the construct measured is not identical across cultures. It may occur when there is only a partial overlap in definition of the construct across cultures, or when not all relevant behaviours associated with the construct are present and properly sampled in each culture (van de Vijver, 1997). As stated in our literature review, entrepreneurial motivation may have different focuses in developing and developed (Western) countries. For instance, South African entrepreneurs could be characterized as collective-oriented, implying that their motivation for entrepreneurship derives from the ability to contribute to the society. On the contrary, Western entrepreneurs are argued to be more individualistic-driven, implying that their motivation for becoming entrepreneurs derives from the desire to control one's own work-situation. Applied to our sample of entrepreneurs, this distinction entails that the definition of entrepreneurial

motivation might have been perceived differently depending on the entrepreneur's cultural background.

When asking the respondents to state their main motivation for starting a business in our questionnaire, all four motivation categories from the GGML typology were listed. As the respondents did not get a full explanation of the definition of each motivation category, we have to consider the likelihood that the cultural and demographical distinctions have affected their answer. Additionally, as the respondents only got to choose between four predefined categories, it is possible that none of the factors suited their motivation classification entirely. Hence, in the absence of additional motivation categories, some respondents might have chosen the category most similar to their perception. This contributes to our previous assumption stating that the measurement motives of entrepreneurial motivation might have been too limited in our study. Consequently, our study faces a certain degree of construct bias that could have been reduced if we were to employ culture-sensitive measures when examining the motivation amongst entrepreneurs from various cultures.

6.2.4 Statistic Conclusion Validity

Statistical conclusion validity is concerned with whether the conclusions we reach about relationships in our data are reasonable (Saunders et al., 2016). There are two types of errors that could occur when drawing conclusions from samples, namely Type I and Type II errors. Type I errors occur when researchers conclude that something is true when in reality it is not. In such cases, the null hypothesis is falsely rejected. Type II errors occur when researchers conclude that something is not true, and therefore fail to reject a false null hypothesis. Type I error is under our direct control when we set the criterion for statistical significance. We limit the occurrence of this error by using the standard level of significance of 0,05. Anything that decreases our power (increases the probability of a Type II error) will also reduce our statistical conclusion validity. Power is affected by several factors and may decrease e.g. if the criterion for statistical significance is low and/or if the sample size (n) is small. Overall, our sample size was sufficient to perform the tests conducted. In our thesis we used three different statistical tests: Chi-square tests, paired T-tests and U-tests. If the conditions for these tests were not to be fulfilled, the probability of Type II errors in our thesis would increase. Our tests fulfilled most, but not all, conditions. Hence, we assume some exposure to Type II error. Nevertheless, we believe the conclusion validity of our study is satisfactory.

6.2.5 General Limitations

Even though we consider our sample as sufficiently large to draw preliminary answers about the population, we would have wished for a higher response rate. Our target population was limited from the GGML study, and hence, we were not able to manipulate the sample procedure. However, we were able to influence the entrepreneurs' willingness and ability to answer. First, it could be argued that by shortening the length of our questionnaire we would have encouraged more respondents to answer. Furthermore, it is reasonable to assume that a more detailed description of our intention and purpose could have increased the response rate of our study. As stressed in section 6.2.2, we face the possibility that the persons entering the motivation card in the initial NME-TE were different from the ones receiving our survey. In such cases, we have to consider the likelihood that some respondents lacked the fundamental knowledge or experience necessary to answer the survey. Furthermore, if the respondents did not immediately recall the Lean Business Canvas referred to in the survey letter, it might have affected their trust in us handling their information confidentially. To assure the respondents of our credibility and encourage them to participate in our survey, an ideal strategy would have been to send out invitations to participants in advance of the survey distribution. This could possibly have led to a higher response rate because the threshold for dropping out would have been higher.

6.3 Theoretical Implications

As previously stressed, there is a lack of research investigating why entrepreneurs decide to engage in entrepreneurship. Our findings exposed great variation and complexity of the formation of entrepreneurial motivation. This supplement existing literature arguing that defining strict definitions may be limiting rather than contributing in the attempt to explain entrepreneurial motivation. By refining definitions, one could fail to cover the whole spectre of motivation types.

Additionally, our analysis disclosed similar patterns of motivation types *across* the diverse cohort of entrepreneurs. This indicate the possibility of entrepreneurs having the same motivation types despite operating within different industries and concerning about distinct objectives. Based on this suggestion, our study provides an interesting addition to research investigating motivation across different types of entrepreneurs.

6.4 Suggestions for Future Research

The results from our study was based on cross-sectional data. For future research it would be interesting to perform a longitudinal study to evaluate change in motivation over a longer period of time. By following the entrepreneurs over an extended period of time, one could investigate how motivation may change continuously after the start-up face.

In our study, we explored the motivations amongst three different cohorts of entrepreneurs. For future research it would be interesting to conduct a study for each cohort separately. By doing so, one could get a deeper understanding of the entrepreneurs' characteristics and motivational drivers. Also, we suggest performing individual-level case studies. As our findings suggests, entrepreneurial motivation is complex and varies between different entrepreneurs. Therefore, we argue that exploring motivation on an individual level is important to understand the nuances that are likely to reflect great variations within cohorts. We believe in-dept-interviews could also be an interesting approach in this coherence. Still, we must stress that we perceive the cohorts in our study only as an example of how categories of entrepreneurs could be defined. For future research we suggest investigating these classifications to examine if there are other cohorts that would be more appropriate. This also applies to the four motivation categories; it should be further investigated if they are sufficiently comprehensive to cover the whole spectre of entrepreneurial motivation.

From our findings concerning motivational change, we find that additional variables and quantitative measures are necessary to analyse the effect of different factors influencing motivational change. For instance, if financial measures were to be included in a longitudinal study, one could investigate how motivation may change over time according to profitability. Additionally, it would be of great interest to include measurements able to reveal if a change in motivation is due to an actual change or due to measurement error.

7. Concluding Remarks

The overall objective of this thesis was to explore the *why* of entrepreneurship. Why do certain individuals engage in business creation while others do not? The entrepreneur is commonly described as a risk-willing, innovative and confident individual. By identifying opportunities and challenging status quo, the entrepreneur transforms ideas into reality. The purpose of this thesis was to examine how entrepreneurs classify their main motivation for engaging in entrepreneurship and further, how they evaluate the importance of different types of motivation. Additionally, we aimed to examine which factors that may influence motivational change amongst entrepreneurs.

First, we explored distinct classifications and evaluations of entrepreneurial motivation. Our overall analysis exposed that our respondents are mainly motivated by intrinsic factors. Hence, the respondents' fundamental reasons for engaging in entrepreneurship seems to originate from their desire of self-realisation and the opportunity to be innovative. This contradicts to the traditional perception describing the entrepreneur as a self-centred individual, mainly concerned with monetary rewards. Additionally, this insight opposes the overall finding of the GGML study where the entrepreneurs were significantly more concerned with profit and raising capital. Several reasons may explain this distinction in motivation classification. First, the distinction may be due to an *actual* change in the entrepreneurs' motivation. This serves as the most obvious reason and may be explained by the timespan between the initial GGML research and our study. Second, the distinction may be due to measurement error. However, due to the limitations of our study, we are not able to determine whether the distinction is due to an actual change in motivation or a measurement error. For future research, this would be an interesting topic to explore.

On cohort level, our analysis revealed both expected and surprising results. As anticipated, an extensive number of South African Entrepreneurs engage in entrepreneurship in order to contribute to social welfare. Considering the collective characteristics of their culture, this finding was expected. Relatively, Art Entrepreneurs are more motivated by being independent and controlling their own worktime. This finding was foreseen as entrepreneurs working in industries like film, music and art commonly engage in entrepreneurship in order to pursue their creative talents. More surprisingly, Tech Entrepreneurs are relatively less concerned with revenue growth and other extrinsic rewards. This finding was unexpected considering the great opportunities to generate profit within the technology sector. The respondents' rating of each

motivation type revealed that most entrepreneurs consider several motivation types as important, even though these were not stated as their main motivation.

Second, we aimed to get a deeper understanding of *why* and *how* entrepreneurial motivation change. Based on suggestions from our literature review, we were eager to examine if we could identify certain factors that might influence motivational change. For this purpose, we checked the occurrence of financial, practical, personal and partnership challenges amongst the entrepreneurs. Our findings revealed that most of our respondents had experienced one or several of these challenges since the start-up. However, our tests did not show any significant coherence between these factors and change in motivation. This may indicate that the change in motivation have been triggered by other internal or external factors. Even though we cannot fully conclude that the above listed factors are solely responsible for influencing motivational change, we must consider the possibility that they may trigger a change when put in coherence with other factors. Thus, our outcome could have been different if the listed factors had been assessed in context to each other and the circumstances simultaneously. For future research, it would be highly relevant to investigate a broader range of internal and external factors to examine their combined influence on motivational change.

Due to the limitations of our thesis, we cannot draw any definite conclusions from our findings. Nevertheless, our study confirms the complexity of motivation and motivational change and provide an interesting addition to research investigating motivation across different types of entrepreneurs. As enlightened in our literature review, entrepreneurship is characterized by uncertainty and constant change. Thus, it is vital to understand the interaction of several factors in order to understand the *why* of motivation and motivational change.

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Appendix

7.1 Appendix 1: Survey

Introduction

Hi,

On behalf of the Lean Business team, students at The Norwegian School of Economics are writing their Master Thesis on how entrepreneur's gets motivated to start their own businesses. We would appreciate your feedback in our online survey. It takes approximately three minutes to answer.

As a thank you, all respondents will receive an executive summary of our findings regarding entrepreneurial motivation after the study is finished. We believe these findings could be of great interest to you.

All responses will remain confidential and secure.

Please follow this link to complete the Survey:

`{1://SurveyLink?d=Take the Survey}`

Or copy and paste the URL below into your internet browser:

`{1://SurveyURL}`

If you have difficulties with the link, please do not hesitate to contact us by email.

Thank you in advance for your participation!

Regards,

Lean Business / Entrepreneurdy

Part 1: General information about the businesses

Q1 In what year did you establish your business?

Page Break

Q2 How many people does your business employ?

Page Break

Q3 Did your business generate revenue last year (in 2018)?

Yes

No

Skip To: Q25 If Q24 = Yes

Skip To: Q30 If Q24 = No

Q4 Approximately how much revenue did your business generate in 2018 (in U.S. Dollars)?

Page Break

Q5 Please indicate the extent to which you agree with the following statement

Our financial performance is better than the performance of our main competitors

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

Page Break

Part 2: Classification of entrepreneurial motivation

Q6 My *main* motivation for starting a business is...

(Only one answer)

- ...to GET money or recognition above what is normal salary level when selling the company
- ...to GIVE something to society rooted in my idealism or values
- ...to experience the fulfillment of MAKING a unique product, service or organization
- ...to LIVE a good life with a reasonable salary and a comfortable and independent work situation

Q7 My motivation for starting a business is...

(Select an importance for each statement)

...to GET money or recognition above what is normal salary level when selling the company

- Very important
 - Important
 - Neutral
 - Less important
 - Not important
 - Choose not to answer
-

...to GIVE something to society rooted in your idealism or values

- Very important
 - Important
 - Neutral
 - Less important
 - Not important
 - Choose not to answer
-

...to experience the fulfilment of MAKING a unique product, service or organization

- Very important
- Important
- Neutral
- Less important
- Not important
- Choose not to answer

...to LIVE a good life with a reasonable salary and a comfortable and independent work situation

- Very important
- Important
- Neutral
- Less important
- Not important
- Choose not to answer

Q8 Please rank the relative importance of the entrepreneurial motivation factors listed below
Drag and drop the factors according to rank (1 = least important, 4 = most important)

_____ To GET money or recognition above what is normal salary level when selling the company

_____ To GIVE something to society rooted in my idealism or values

_____ To experience the fulfillment of MAKING a unique product, service or organization

_____ To LIVE a good life with a reasonable salary and a comfortable and independent work situation

Page Break

Part 3: Motivational change

Q9 Have you experienced any of the following factors since the start-up?

(Several factors allowed)

Serious financial problems

I have got new partners with somewhat different perspectives on the start-up than I have

Serious practical problems in development of the start-up

Serious personal challenges in my private life

None of the above

Page Break

Q10 Has your motivation for developing your business changed over the last years?

Yes

No

Skip To: Q18 If Q16 = Yes

Skip To: Q21 If Q16 = No

Q11 Please describe what has changed your motivation

Page Break

Having the best technology is a major concern for our business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products and services we offer should be based on the best of technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Entrepreneurial motivation

7.2 Appendix 2: Chi-square test of Main Motivation

Thesis

	<i>Observed</i>	<i>Expected</i>	<i>Chi-square</i>
GET	3	20,25	14,69444444
GIVE	26	20,25	1,632716049
MAKE	37	20,25	13,85493827
LIVE	15	20,25	1,361111111
Total	81	81	31,54320988

Chi-square 31,54320988
 α 0,05
p-value **6,53188E-07***

**The result is significant*

GGML

	<i>Observed</i>	<i>Expected</i>	<i>Chi-square</i>
GET	22	20,25	0,15123457
GIVE	14	20,25	1,92901235
MAKE	28	20,25	2,96604938
LIVE	17	20,25	0,56790123
Total	81	81	5,56790123

Chi-square 5,56790123
 α 0,05
p-value 0,13463

**The result is not significant*

7.3 Appendix 3: Chi-square test

Observed

	<i>GET</i>	<i>GIVE</i>	<i>MAKE</i>	<i>LIVE</i>	<i>TOTAL</i>
Thesis	3	26	37	15	81
GGML	22	14	28	17	81
TOTAL	25	40	65	32	162

Expected

	<i>GET</i>	<i>GIVE</i>	<i>MAKE</i>	<i>LIVE</i>	<i>TOTAL</i>
Thesis	12.5	20	32.5	16	81
GGML	12.5	20	32.5	16	81
	25	40	65	32	162

Chi-square	19.4112
P-value	0.000225*
α	0.5

**The result is significant*

7.4 Appendix 4: T-test of Average Rating of Motivations (our Study)

	<i>GET</i>	<i>GIVE</i>
Mean	2,716049383	4,49382716
Variance	2,205864198	0,92808642
Observations	81	81
Pearson Correlation	0,256479849	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	-10,3279556	
P(T<=t) one-tail	1,11319E-16	
T critical one-tail	1,664124579	
P(T<=t) two-tail	2,22637E-16 *	
T critical, two-tail	1,990063421	

	<i>GIVE</i>	<i>MAKE</i>
Mean	4,49382716	4,62962963
Variance	0,92808642	0,58611111
Observations	81	81
Pearson Correlation	0,284982319	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	-1,16862675	
P(T<=t) one-tail	0,12301233	
T critical, one-tail	1,664124579	
P(T<=t) two-tail	0,246024659	
T critical, two-tail	1,990063421	

	<i>GET</i>	<i>MAKE</i>
Mean	2,716049383	4,62962963
Variance	2,205864198	0,58611111
Observations	81	81
Pearson Correlation	0,236153768	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	-11,4689025	
P(T<=t) one-tail	7,1823E-19	
T critical, one-tail	1,664124579	
P(T<=t) two-tail	1,43646E-18 *	
T critical, two-tail	1,990063421	

	<i>GIVE</i>	<i>LIVE</i>
Mean	4,49382716	3,90123457
Variance	0,92808642	1,24012346
Observations	81	81
Pearson Correlation	0,011076156	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	3,642011629	
P(T<=t) one-tail	0,000239289	
T critical, one-tail	1,664124579	
P(T<=t) two-tail	0,000478579 *	
T critical, two-tail	1,990063421	

	<i>GET</i>	<i>LIVE</i>
Mean	2,716049383	3,90123457
Variance	2,205864198	1,24012346
Observations	81	81
Pearson Correlation	0,368273334	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	-7,14648999	
P(T<=t) one-tail	1,85306E-10	
T critical one-tail	1,664124579	
P(T<=t) two-tail	3,70611E-10 *	
T critical, two-tail	1,990063421	

	<i>MAKE</i>	<i>LIVE</i>
Mean	4,62962963	3,90123457
Variance	0,58611111	1,24012346
Observations	81	81
Pearson Correlation	0,176484745	
Hypoth. Mean Diff.	0	
df	80	
t-Stat	5,307996609	
P(T<=t) one-tail	4,83893E-07	
T critical, one-tail	1,664124579	
P(T<=t) two-tail	9,67787E-07 *	
T critical, two-tail	1,990063421	

*The result is significant

7.5 Appendix 5: U-test of Factors Influencing Motivational Change* (our Study)

	<i>Financial YES</i>	<i>Financial NO</i>
Proportion	24	28
Sample size	36	45
α	0,05	
U	0,4146	
p-value	0,6608	

	<i>Personal YES</i>	<i>Personal NO</i>
Proportion	12	12
Sample size	36	45
α	0,05	
U	0,6529	
p-value	0,7431	

	<i>Practical YES</i>	<i>Practical NO</i>
Proportion	18	17
Sample size	36	45
α	0,05	
U	1,1034	
p-value	0,8651	

	<i>Partnership YES</i>	<i>Partnership NO</i>
Proportion	5	10
Sample size	36	45
α	0,05	
U	-0,9594	
p-value	0,1687	

**The test revealed no significant results*