Get Give Make Live

An empirical comparative study of motivations for technology, youth and arts entrepreneurship

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Abstract

Purpose – This study aims to explore the motivations and business ideation processes of 776 entrepreneurs from three diverse cohorts of technology, youth and arts entrepreneurs.

Design/methodology/approach – Using an inductive approach inspired by grounded theory, observations resultant from the use of a Web-based digital test environment are openly coded, in which 776 individual entrepreneurs have stated their objectives for engaging in entrepreneurship and performed a business ideation process.

Findings – The study inductively derives a typology of objectives types – "GET GIVE MAKE LIVE" – and finds that beyond the pursuit of profitable opportunities, there is considerable variation, complexity and combinations to the reasons why individuals engage in entrepreneurship. A total of 76 percent of the population in this study have more than one objective, with 48% having more than one type of objective. While the arts entrepreneurs tended to engage in entrepreneurship to "LIVE" and the tech entrepreneurs were more inclined to "GET," the most frequently observed objective type in all cohorts was to "MAKE." A total of 74 percent of the entrepreneurs took an effectual approach and began defining their business idea with their core competency, yet technology entrepreneurs were the most likely to start by defining their key market.

Practical implications – Entrepreneurship educators, trainers and helpers should refrain from a standardized approach which assumes that entrepreneurs share the same set of singular motivations. Interventions might benefit from a student-centered program which promotes reflection and articulation of the entrepreneurs' objectives and their diversity.

Originality/value – This study answers the call for research to embrace entrepreneurial diversity and compliment previous explorations of entrepreneurs' motivations through an empirically grounded study of three diverse cohorts of entrepreneurs.

Keywords Effectuation, Entrepreneurial motivation, Youth entrepreneurship, Inductive research, Resource-based view, Arts entrepreneurship, Creative industries

Paper type Research paper

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Introduction – a fictional story about lemonade and entrepreneurs' objectives

The following is a fictional story meant to introduce the reader to the constructs we have discovered in our empirical comparative study of motivations for entrepreneurship, namely, "GET," "GIVE," "MAKE" and "LIVE." Imagine that you are in Texas on a hot summer day. You are walking around in a suburban neighborhood, with sweat on your forehead, turn a corner, and bam, to your surprise, you encounter four seven-year-old children selling lemonade each from their own lemonade stand. They are not working together; they are all competitors in the local Texas suburban lemonade marketplace. As a researcher of entrepreneurship, you are thirsty and fascinated and begin researching this (not so strange) phenomenon. You whip out your iPad and begin typing observations to understand how, when and with what effect these lemonade stands have come into existence. Fortunately, because their parents are sitting right behind these young entrepreneurs, you are able to discuss and get informed consent from both the parents and the young entrepreneurs to participate in an informal research study. Thus, you begin to ask these young cold beverage entrepreneurs, who are named Geraldine, Ginnie, Maggie and Lisbeth, some questions.

It turns out that the facts around their business operations are quite similar. They all produce the lemonade in a similar fashion. They all recognized an opportunity to sell lemonade because it was hot and people in Texas like to drink cold, sweet things on hot days. Their pricing, marketing and distribution strategies were all the same, and they all source their raw materials for free from their parents' lemon trees. They all started their stands just a few weeks ago at the end of June. In fact, as a researcher, you are having a bit of difficulty finding meaningful differences in these young entrepreneurs' stories. Until Geraldine mentions your iPad.

"Trade you some lemonade for your iPad," she says. You smirk. "Why would I do that?" you ask her. "Cause that's why I'm selling lemonade, so I can get an iPad." Inspiration strikes, and you run over to Maggie.

"Maggie, why are you selling lemonade?" "Too many fruit flies," she says. You scratch your head. "What do you mean?" you ask:

> Too many fruit flies eating the lemons on the ground, and I don't like flies, and I also remember the environment man on TV saying it¨*s* bad to throw away food, so I saw the lemons falling to the ground and the flies eating them and the sugar on the table and it was hot, real hot, and I thought why not make lemonade? It is really fun to make lemonade. So, I maded lemonade.

Yes, she did say *maded* like cute seven-year-olds do – and yes, her objective was to just *make* something with those lemons, unlike young Geraldine who just wants an iPad.

You walk over to Ginnie. "Why are you selling lemonade, Ginnie?" "I'm not really selling lemonade, I'm selling electrolytic calorific hydration." Ok, maybe a seven-year-old does not use those big words, but anyways, she continues:

> It's like really hot, and it is really important people drink lots and don't pass out. I don't like when people don't drink enough and pass out. We can't have people getting all tired!

You walk over to Lisbeth. "And you, Lisbeth, why are you selling lemonade?":

> I don't know, I just thought it would be fun, and I needed something to do and perhaps I could make some money to buy chocolate. My mom won't give me chocolate. Nothing is free in life.

You take a sip of that cool lemonade. And then you have an insight. Sometimes, in some circumstances, for the study of entrepreneurship and entrepreneurs to be interesting, the *why* may be more revealing than the what, how or when of the creation of any good or service. Because Geraldine is an entrepreneur to *GET*, Ginnie to *GIVE*, Maggie to *MAKE* and Lisbeth to *LIVE*.

This paper explores the *why* as an overlooked aspect of entrepreneurs and entrepreneurship, and why its investigation may be promising for practitioners and scholars alike. Further, we are also curious as to what role this *why* may play in the determination of the *what* and the *how*. When starting a project, do entrepreneurs begin with their resources? Or do they begin with a market? Is Geraldine's starting point the thirsty neighbors' need for something refreshing, while Maggie's starting point is the access to free lemons from the backyard? When deciding to venture, do entrepreneurs first look at their competencies, and decide what to do from there? Or do they start with defining the needs of the market, and then find the resources to satisfy those needs?

Purpose of the paper and research questions

To further develop our understanding of the role this *why* of entrepreneurship has in influencing the *what* and the *how* of entrepreneurial behavior, we have conducted a study of 776 entrepreneurs composed of three distinct and diverse cohorts: arts entrepreneurs in Norway, technology entrepreneurs in the United Kingdom and young entrepreneurs in South Africa. Through the creation and use of a novel digital laboratory test environment, our study empirically observes the motivations and business ideation processes of these entrepreneurs to understand *why* they are engaging in entrepreneurship and the initial entrepreneurial logic used in defining their business idea. We are interested in answering the following research questions:

RQ1a. What are the motivations and reasons why individuals engage in entrepreneurship?

RQ1b. How do these motivations and reasons vary between diverse cohorts of entrepreneurs?

RQ2a. Do entrepreneurs define their core competence or their key market/key contribution first?

RQ2b. Do diverse cohorts of entrepreneurs differ in regards to whether they define their core competence or their key market/key contribution first?

RQ3. What is the relationship between the motivations and reasons why individuals engage in entrepreneurship, and whether they define their business with their core competence or their key market/key contribution first?

The reader should note that in this paper, we discuss motivations, reasons and objectives with a high degree of definitional interoperability. These words are closely related. Indeed, one common definition of motivation is "a reason or reasons for acting or behaving in a particular way" (Simpson and Weiner, 2019). In this study, we view an *objective* as a goal-based reason which motivates an individual to engage in entrepreneurship.

The paper proceeds as follows. First, we discuss why this *why* of entrepreneurship is something deserving of explorative empirical investigation. Second, we present the research design, which is composed of a normative model of entrepreneurship (NME) and a digital laboratory test environment (NME-TE) through which our participants interact with the NME-TE and we make our observations. Third, we present the results of our analysis of their objectives and the entrepreneurial logic test. Fourth, we discuss the results and limitations to the study. Finally, the implications for educators, practitioners and researchers are discussed, and we conclude with promising areas for future research.

Why do entrepreneurs entrepreneur?

Scientific advancement happens at such a pace that one often forgets to question where they started. When you look through a telescope at the night sky, do you question the post-Galilean paradigm of heliocentrism, or are you instead placing your attention on the gaseous stars and planets in our solar system? Whether the Earth or the Sun is at the center of the universe would seem to have little to no relevance when instrumentally using theory of optics, glass and light to document and observe the universe. It is easy to take foundational knowledge for granted.

It is possible that the field of entrepreneurship has advanced to the point where we focus on entrepreneurial "stars and planets," at the expense of ignoring a fundamental aspect of knowledge – a "Galilean" core. As the study of individual entrepreneurial action, rather than the individuals themselves (Gartner, 1988), entrepreneurship and entrepreneurial actions are arguably influenced by an individual's motivations, goals and goal-oriented behavior at its core.

Entrepreneurship research often focuses on the "how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane and Venkataraman, 2000), yet more attention could be paid to the *why* of entrepreneurship. *Why* do people look for opportunities to create goods and services? The field of economics, in which entrepreneurship has its roots, might answer this question by looking at the primary motive of "homo economicus," whom is described as "unswervingly rational, completely selfish" (Levitt and List, 2008). If this were true, would not all individuals that engage in entrepreneurship be in it to rationally maximize their profit? Forson *et al.* (2014) point out the challenges of entrepreneurship research which views "[. . .] *homo economicus* stripped largely of affect, intersubjectivity, personal narratives, discursive groundings or intersectional complexities" (p. 54).

Shane and Venkataraman's definition of entrepreneurship focuses on "profitable" opportunities (p. 217), yet there are numerous examples of arts entrepreneurs and social entrepreneurs whose objectives are not profit but instead going-concern operational sustainability and social change. Growing fields of research on arts entrepreneurship and social entrepreneurship demonstrate the scientific interest and existence of these entrepreneurs. We do not disagree with Shane and Venkataraman's definition. Instead, we submit that exploring why entrepreneurs do what they do is a natural starting point for inquiry into the phenomena of entrepreneurship. This is especially true given a society's interest in creating more entrepreneurs as demonstrated by the tremendous growth of entrepreneurship education around the world (Kuratko, 2005; Lackéus, 2015). With evidence of entrepreneurship being taught in academic disciplines as varied as music to nursing (Beckman, 2005; Boore and Porter, 2011; Toscher and Bjørnø, 2019), where students arguably study nursing to become nurses and music to become musicians, it could be argued that both educational institutions and students have different reasons *why* they are engaging with entrepreneurship compared to those business students who study entrepreneurship in the business school.

Distinct branches of entrepreneurship research have proposed their own definitions to differentiate the types of entrepreneurs which they study and partially address this *why*. Arts entrepreneurs have been defined to engage in entrepreneurial processes to promote their "creativity and autonomy" (Chang and Wyszomirski, 2015), with empirical research demonstrating and highlighting their non-economic creative motivations in pursuing their work (Comunian, 2009). Definitions of social entrepreneurs view them as "mission-driven" individuals (Abu-Saifan, 2012) whose mission is "creating social value for the public good" (Austin *et al.*, 2006). Further, empirically grounded inductive studies into social

entrepreneurship have been insightful in revealing the plurality of reasons these entrepreneurs are driven to entrepreneur, which includes motivations such as local conditions, an intentional mindset, lifestyle motives and receiving acknowledgement (Aileen Boluk and Mottiar, 2014; Omorede, 2014). On an even coarser level, there appear to be fundamental distinctions and attempts to typify entrepreneurs whether they are entrepreneurs out of "necessity" or "opportunity" (Harding *et al.*, 2002). Yet, despite evidence demonstrating the diversity of entrepreneurs' motivations, we are not aware of a study which attempts to understand such motivational variation using several diverse cohorts within the same research design. This, in combination with a recent call by scholars to embrace and research entrepreneurial diversity (Welter *et al.*, 2017), makes a compelling case for such a research design.

The debate of the order in which entrepreneurs come up with their business idea is related to this *why*. If entrepreneurs are interested in competitive advantage and maximizing their chance of financial success, they would start with whatever improved their probability of success is. Conversely, if profit was not their objective, one would think they would start by looking at their own resources and capabilities. There are several opposite viewpoints within the literature which address this dilemma.

Do entrepreneurs create a business idea by defining the market they want to serve and the problem that target group may have? This would be factual according to "The Environmental Models of Competitive Advantage," which tries to understand competitive advantages by analyzing the organization's external opportunities and threats in the market (Porter, 2008). Here, Porter understands the company and its success in accordance to a competitive ecosystem containing threats from new entrants and substitutes, the bargaining power of suppliers and customers and, finally, the existing competitors within the industry.

Alternatively, do entrepreneurs start defining their business by analyzing their internal resources and competences? Barney (1991) argues that entrepreneurs are more likely to define their business model based on their "assets, capabilities, organizational processes, firm attributes, information and knowledge" than on an analysis of the needs that exist in the market. This view is a central part of "*Resource-Based entrepreneurship theory*" (Simpeh, 2011). Prahalad and Hamel (1990) add to this discussion with their "competence-based view" of the firm. They claim that some resources are more important than others. The resources that define the uniqueness of the entrepreneurial organization constitute "unique knowledge" or the "core competence" of the organization.

Sarasvathy (2001, p. 244) argues in a similar fashion, by stating that the entrepreneur starts with the resources she has at hand and general goals:

> such as the desire to make lots of money or to create a valuable legacy like a lasting institution, or, more common, to simply pursue an interesting idea that seems worth pursuing.

From this starting point, the entrepreneur tries to create as much value as possible, rather than having a clear target objective and trying to find the necessary resources to get there. Based on research of expert entrepreneurs, Sarasvathy promotes her "bird in hand" principle, where she suggests that an entrepreneur should start with what they have, asking questions such as "What are my characteristics and preferences? What can I do? Who do I know?" (Sarasvathy, 2006).

So, we would argue that the understanding of the "why" of entrepreneurship integrates both the understanding of motivations and the understanding of the starting point and entrepreneurial logic behind the business ideation order.

Research design: a normative model of entrepreneurship and the digital laboratory test environment

We are able to conduct our study through the utilization of two things. First, an NME and, second, the digital laboratory test environment related to it (NME-TE). In 2012, Shane (2012) reflected on his highly cited article in which he established the definitional direction and scope for modern entrepreneurship research (Shane and Venkataraman, 2000), and addressed the major yet necessary challenge of normatively trying to find a "best-practice of entrepreneurship":

> We did not intend to say that the entrepreneurial process is rational, planned, strategic, or even temporarily ordered, but merely that the entrepreneurial process has subprocesses. There may be no optimal entrepreneurial process, allowing for many equally effective approaches, which is an important issue for the field to explore. It is also possible that one approach may be optimal but that many entrepreneurs do not approach the process "the best way". This point has important ramifications for the fields desire to be normative.

To discuss the concept of such a normative model, we have begun testing a model in practice through the creation of the NME-TE, which is currently operationalized as a software platform available at www.entreprenerdy.com. This Web-based digital platform has been used by 13,000 entrepreneurs in Norway, Denmark, the UK, South Africa and Sweden (among other countries) during the previous eight years through various entrepreneurship education, support and training programs. The NME-TE is a business planning tool which entrepreneurship helpers such as incubators, educators, business advisory organizations and schools use to assist entrepreneurs to organize their business ideas, resources, tasks, actions and forecasts during new venture creation and business development processes. Entrepreneurs' behavioral interaction with the tool has been systematically recorded, together with the firm's performance and financial data. It is important to know that we do not claim to have designed a generally applicable approach to entrepreneurship; nor the best normative model. Nor is it within the scope of this paper to validate or prove the benefits of our NME. Instead, our NME is both a suggested starting point for discussion and a necessary requirement for being able to conduct our study. The NME, in effect, introduces a series of entrepreneurial elements from theory (Dahle *et al.*, 2020). We present this model in Figure 1 to provide the context of the steps and entrepreneurial elements which are part of the test design presented in this article. The NME consists of seven steps, beginning with "Purpose," and contains 27 elements (Dahle *et al.*, 2019). Those elements which are used in this study are in bold italics in Figure 1.

In this study, we focus on four of the elements. Motivation from "purpose" and "core competence," and "key contribution" and "key market" from "business idea." The entrepreneurs in the study were given the following instructions when entering these four elements into the NME-TE (Table I).

The population: three diverse cohorts of entrepreneurs

From the total of 13,000 entrepreneurs whom have used the NME-TE, we sampled individuals into three separate cohorts of entrepreneurs, who all participated in receiving entrepreneurship support through a cohort-specific customized entrepreneurship education program (EEP). These programs were delivered in-person with the NME-TE serving as the "backbone" to support each individual EEP – see Table II for the description of the EEPs. We believed this approach would provide the richest data for answering our research questions and satisfying our primary interest in understanding the motivations and entrepreneurial logic of both individual entrepreneurs within and across cohorts. We created cohorts which had a meaningful degree of heterogeneity between the cohorts but were

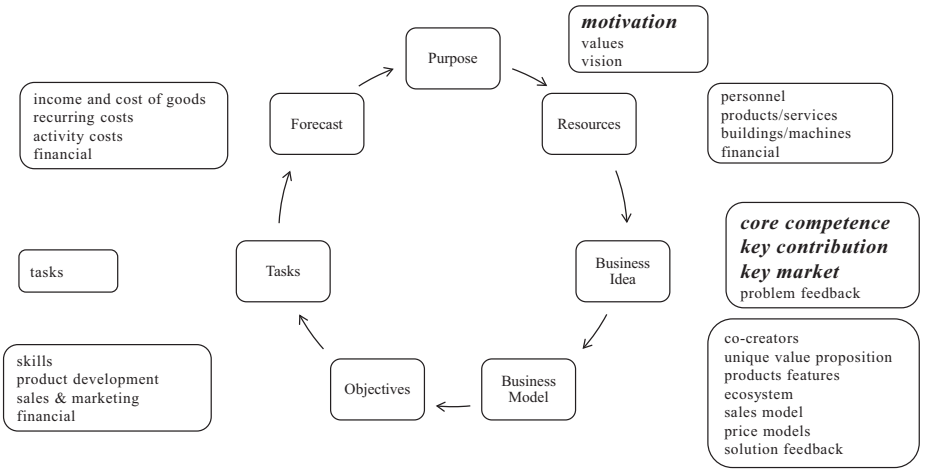


Figure 1. The normative model of entrepreneurship, as operationalized in the NME-TE

Test element	Operationalized definition presented to participant in the NME-TE
Motivation	"Create cards for what you want to get out of the company personally. Do you want to sell the company? Do you want to leave it to the next generation? Is it money that motivates you, or is it something else?"
Core competence	"Here you should add what makes you better suited to solve the problem than anyone else. Why should the customer choose you? What will make it difficult for the competition to copy you? Add as many cards as you need. One uniqueness can relate to one problem, or to many"
Key contribution	"People are usually willing to pay good money if you solve a problem for them. Given your uniqueness and resources; what problem can you solve? Try to be creative and let the wild ideas flow"
Key market	"No point in solving problems if you do not know who has them. Try to think of the possible target groups for all imaginable problems you are solving. Don't make the target groups too wide and generic. It is so much easier to reach out to a small and clearly defined group"

Table I. Test elements used in the entrepreneurial logic test

relatively homogenous within an individual cohort, an approach inspired by the notion of theoretical sampling to study variation for the purposes of "making comparisons" (Strauss and Corbin, 1998, p. 201). Thus, we used the following sampling criteria to select entrepreneurs that:

- participated in the same EEP and used the NME-TE;
- were subject to the same content and training materials during the course of their cohort-specific EEP;
- was of a size of at least 100 individual entrepreneurs; and
- were similar enough (whether in terms of sectoral, social or cultural demographics) as to be suitably treated as a relatively homogenous cohort in this study.

We believed the above criteria helped us achieve our conditions of homogeneity and heterogeneity to answer our research questions. We found three cohorts (arts, technology

Cohort	Cohort size and # of observations	Description
Arts entrepreneurs – Norway	136 participants – 325 observations of "objectives" consisting of 1,870 total words	*The individual entrepreneurs*: Arts entrepreneurs working in cultural and creative industries, who have the ambition to live off their talent. These include entrepreneurs working in music, film, photography, games, architecture, design, advertising, cultural heritage and artistic activities. Participants gain insight into a practical and creative way to develop their business as well as access to good tools *The observation period*: This cohort contains data entered into the NME-TE, the period of January 2014-March 2019 *The entrepreneurship education program*: Two "lunch-to-lunch" seminars, separated by a two-week break, in which entrepreneurs interact with the NME-TE. After the second "lunch-to-lunch," entrepreneurs participate in a nine-month mentorship program with a mentor. There were approximately 12 students during each seminar
Technology entrepreneurs – United Kingdom	211 participants – 252 observations of "objectives" consisting of 2,018 total words	*The individual entrepreneurs*: Entrepreneurs are participants in the University College London's educational technology incubator. The incubator provides business growth support and bespoke mentoring to small- and medium-sized enterprises (SMEs) in the education technology sector *The observation period*: This cohort contains data entered into the NME-TE over the period of January 2018-March 2019 *The entrepreneurship education program*: A two-day introduction seminar, in which entrepreneurs interact with the NME-TE. Afterwards, a six-month mentorship program with systemic follow-up
Young entrepreneurs – South Africa	429 participants – 1,136 observations of "objectives" consisting of 10,379 total words	*The individual entrepreneurs*: Youth entrepreneurs aged between 18 and 35 years with a high-potential youth-owned business which aims to become suppliers to organizations in the private and public sector. Entrepreneurs have existing businesses that provide products and services that are aligned to supply chain needs. They are participants in a six-month program 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 *The observation period*: This cohort contains data entered into the NME-TE over the period of January 2018-March 2019 *The entrepreneurship education program*: Four days of instruction at eight hours per day. This four-day program was held at six different locations throughout South Africa

Table II.
Description of the three cohorts of entrepreneurs

and youth entrepreneurs – see Table II) which satisfied the above criteria. To help further explain our view of homogeneity and heterogeneity in our sampling and cohort design, arts entrepreneurs such as musicians, designers and comic book illustrators belong to the arts entrepreneurs cohort. Similarly, technology entrepreneurs with various educational technology startups addressing different markets and customer problems belong to the technology entrepreneurs cohort. While we acknowledge there are some degrees of heterogeneity across individual entrepreneurs *within* each cohort, each cohort can be viewed as relatively homogenous when considering the degree of heterogeneity and difference *between* the cohorts, thus warranting the comparison of these cohorts as separate, whole units.

Each cohort consists of the complete population of students whom have gone through a specific entrepreneurship education program, in which they used the NME-TE and applied it to their real-world entrepreneurial projects. We did not remove any individual entrepreneurs from these cohorts, with the exception of cleaning data and removing blank entries which we discovered in the NME-TE's database.

All entrepreneurs were informed via the NME-TE's terms of use and privacy policy that the company owning and operating the NME-TE may share their data for research and academic study. All entrepreneurs accepted the specific use of their data for research purposes understanding that they could revoke their permission on a "case-by-case basis" and all research data to be published will be anonymized and aggregated. Further, the treatment of data adheres to the GDPR rules, both with regard to the data processor and with regard to the data controller.

Finally, all the data in the study are aggregated and anonymized so that no data can be tracked back to a specific entrepreneurial project or entrepreneur. The unaggregated data has only been seen by the first and second authors of the paper, and even for them, the company names/case names were replaced by sequentially generated case numbers. The individual names of each entrepreneur were replaced by sequentially generated entrepreneur numbers.

The two tests. We aimed to answer our research questions through two tests conducted in the NME-TE.

Testing RQ1 – the objective type test (Test I)

In the first test, we explored our participants' objectives (or motivations) for starting a company and engaging in entrepreneurship. Corresponding to the first step ("Purpose") in the NME, the participants described their objectives in their own words within the NME-TE. Each objective entered into the NME-TE was recognized as a unique observation based upon whether it was separated via comma or a new sentence. All entries were anonymized. Norwegian entries were translated into English by one of the co-authors who is a native Norwegian speaker. We then inductively explored their responses through an open, iterative coding process (Strauss and Corbin, 1998) rooted in grounded theory (Charmaz and Belgrave, 2007; Glaser and Strauss, 2017) to ultimately arrive at a coding scheme composed of four categories of "objective types." We take a qualitative description approach to our analysis in an effort to arrive at an interpretation of our data that is "low inference" and "likely to result in easier consensus among researchers" (Glaser and Strauss, 1967; Miller and Crabtree, 1992; Sandelowski, 2000). Further, we note that we display results in a "quasi-statistical analysis style" using code counts and present descriptive statistics to summarize our data (Miller and Crabtree, 1992, p. 18; Morgan, 1993).

This iterative, open-coding process enabled us to move toward building instead of testing theory; analyze a large amount of data; and be systematic and creative at the same

time (Strauss and Corbin, 1998). We ultimately arrived at a coding scheme for which all of our observations had a good fit. This coding scheme was composed of four "objective types": objectives to *GET*, objectives to *GIVE*, objectives to *MAKE* and objectives to *LIVE*. Table III provides example responses from the data which are representative of each of these objectives. We then coded each observation with one of these four types.

We calculated summary statistics after we coded our participants' objectives. These summary statistics are based upon grouping observations together according to their coded "objective type." Of the 776 total participants in this study, 609 entered objectives into the NME-TE. To both explore our data and account for potential over-representation and weighting biases, we calculated summary statistics and did these groupings in three ways: an absolute count of observed objective types, a relative count of observed objective types and a majority determination of objective type for each individual participant. While the first two methods consider the objective as the unit of analysis, the latter (majority determination) considers the individual entrepreneur as the unit of analysis.

The absolute count of observed objective types is simply that – each time we observed a stated objective by a participant, we coded it with an objective type and then summed this total amount of observations. The total count of observations of objectives in our study is 1,713. In this sense, the unit of analysis via this method is the individually observed objective.

The relative count of observed objective types attempts to account for over-representation bias by an individual participant within the entire population. For example, one participant may state 30 objectives all within one objective type (such as "GET"), whereas another participant may state only two objectives of the type "LIVE"; because our goal is to present summary statistics for both objective types and entrepreneur cohorts, we

Table III. Objective-type coding scheme and representative examples

Objective type	Operational definition: *the reason for starting your company is. . .*	Example observations from our data
GET	To GET an external, extrinsic reward in the form of money or recognition above what is a normal salary level. Typically, the participants wanted an "exit" or "dividends." Included financial objectives which are a precursor to the said objectives, such as "return on investment" or "revenue growth"	"exiting in 5-7 years with at least $100mn valuation" "profit"
GIVE	To GIVE something to society. Rooted in idealism or values. This can be everything from leaving a lasting legacy, job-creation, to making the world a better place with the product or service they provide	"to create employment in the local community" "to lift the social standard of living in the township"
MAKE	To experience the fulfillment of MAKING a product, service or organization. This is based on intrinsic motivation, independent from an external reward, and could revolve around creativity	"to create the best technology platform for education and training"
LIVE	To LIVE a good life. This includes a reasonable salary and is most closely aligned with "necessity" entrepreneurship. It may also include a comfortable work situation, freedom to control your own work situation, the benefit of good colleagues, etc.	"to make enough money to live comfortably" "want to control my own time"

calculate a relative count value for each objective type within each individual participant, represented as follows:

For each of four objective types x, within each individual participant p,

$$OT_{Rx,p} = \frac{o_{n,x}}{\Sigma o, p}$$

See Footnote 1 for an explanation of the above equation[1]. In essence, the unit of analysis in the relative count is the individually observed objective, which has been relatively weighted.

The majority determination of objective type is where we assign an objective type to each individual participant within the study, where that determination is made by whichever objective type has the most entries. For example, if one participant had five objective entries (two coded as "GIVE," and three as "LIVE"), then that participant is coded as "LIVE." In the circumstance of a tie, we looked at all objectives as a whole to determine the essential and comprehensive meaning of the participant. Effectively, the unit of analysis in this method is the individual participant, not the individually observed objective.

In the Results section, we have clearly indicated which objective grouping method we have used for that particular result.

Testing RQ2 – the business ideation order test (Test II)

In the second test, we conducted a test of the order in which the entrepreneurs entered the elements of their business idea. In essence, these observations enabled us to determine whether they are more causal with a market-based view (Porter, 2008) or effectual with a resource-based view (Sarasvathy, 2001; Barney, 1991).

This test occurred during the third step ("business idea") of the NME-TE. As mentioned, the NME-TE is a digital Web-based platform where we are able to operationalize and observe entrepreneurs' actions. In the business ideation order test, our participants selected one of two mutually exclusive test elements which served as a starting point for their business idea. These mutually exclusive elements are as follows: core competence and key contribution/key market. We performed an order-based analysis to represent an entrepreneur's business ideation. In essence, we are interested in answering the question of which of the test elements they chose to focus on first. We view the decisions that our participants made within NME-TE to be based on what they viewed to be important, and that this importance is a reflection of what we deem their entrepreneurial logic when ideating. In some senses, this portrays the participant entrepreneurs as logical actors in that we assume that they are in control of their choices in the NME-TE and that they base their own choices on what they believe to be important to them. All efforts were undertaken to ensure that each cohort received similar instructions during their entrepreneurship education program so that they would not be biased to start with one element versus another.

We group key market and key contribution together because we believe both are representative of causal logic and a market-based view, whereas core competence is representative of effectual logic and a resource-based view. We then cross-tabulated these observations with observations resulting from Test I to derive a comprehensive table of summary descriptive statistics.

Results

RQ1a. What are the motivations and reasons that individuals engage in entrepreneurship?

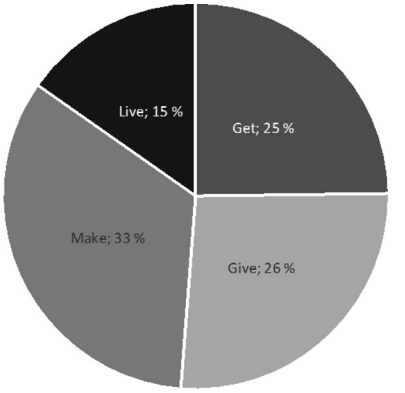
Figure 2 shows how the population of entrepreneurs in this study are distributed among the four main objective types using the majority determination method.

A total of 74 per cent of our population entered more than one objective for starting their business into the NME-TE, and 48 per cent of the population entered more than one objective type. The combinations of objective types entered by this 48 per cent are presented in Figure 3.

RQ1b. How do these motivations and reasons vary between diverse cohorts of entrepreneurs? Figure 4 displays the absolute count of objectives we observed entered into the NME-TE, sorted by both cohort and objective type.

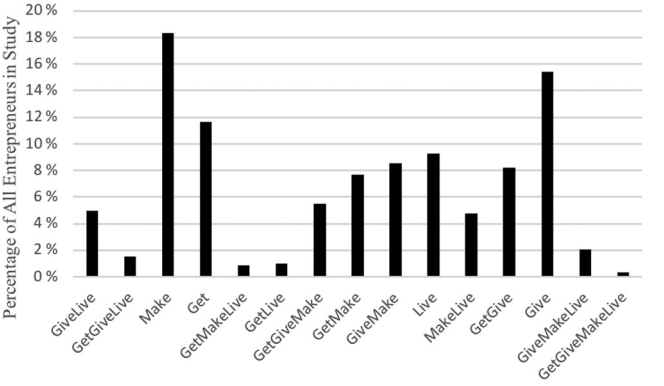
RQ2a. Do entrepreneurs define their core competence or their key market/key distinction first? Figure 5 displays results from Test II, the business ideation order test, in which 74 per cent of the population began defining their business idea according to their "core competence," and 26 per cent according to the "key contribution/key market."

RQ2b. Do diverse cohorts of entrepreneurs differ in regards to whether they define their core competence or their key market/key contribution first? Figure 6 displays the results from the business ideation order test, broken out by individual entrepreneur cohorts.



Notes: Majority Determination Method

Figure 2. GET GIVE MAKE LIVE – distribution of population among four objective types (majority determination method)



Note: Absolute count method

Figure 3. Combinations of objective types observed (absolute count method)

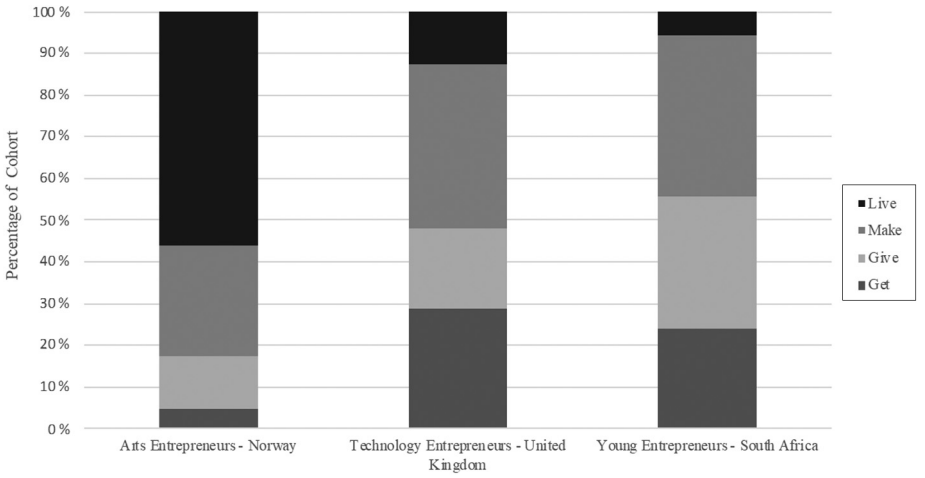


Figure 4.
Absolute count of objective types by cohort

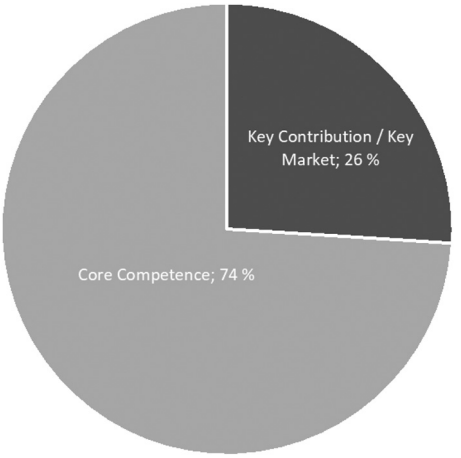


Figure 5.
Business ideation order test

RQ3. What can we observe from the cross-tabulation of results from RQs 1 and 2?
Figure 7 presents a cross-tabulation of results from Test I and Test II. This figure groups together all individuals who were assigned the same objective type (via majority determination), and then displays the percentage of that group which began with their "core competence" or "key market/key distinction" first during business ideation.

Finally, Table IV presents a cross-tabulation of all results from Tests I and II for all cohorts. We analyzed and grouped the objective type from both Tests I and II via three methods: an absolute count of objective types, a relative count of objective types and a majority determination of objective types. We did this as a sensitivity analysis to account for any over-representation or weighting biases within an individual participant's responses.

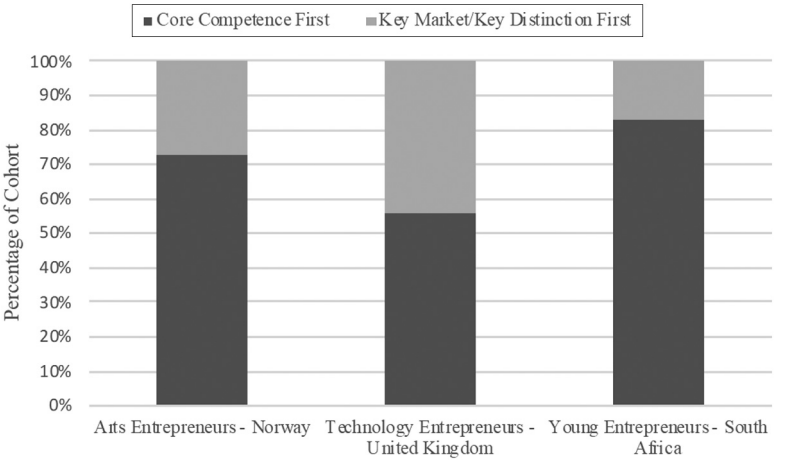


Figure 6.
Results from business ideation order test

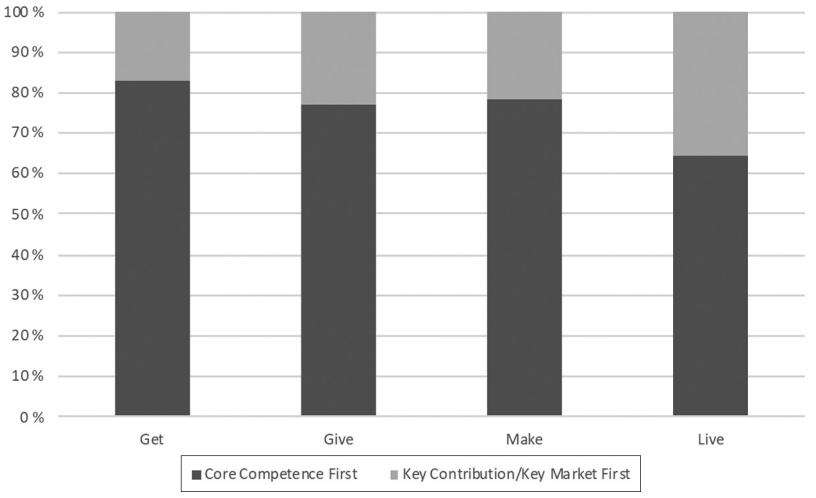


Figure 7.
Cross-tabulation between business ideation order and objective type by majority determination

Discussion of results

RQ1a. What are the motivations and reasons that individuals engage in entrepreneurship?

Figure 2 shows that the participants in our population are relatively equally distributed across the four objective types when using the majority determination method to assign them a singular objective type. Through the three different objective typing methods, we learned that while each of these methods slightly changes the distribution of observed objective types, all of these distributions within the cohorts are quite similar, as seen in Table IV. For example, while 78 per cent of participants whose objectives were typed as "MAKE," via the majority determination method, defined their core competence first, this number was 80 per cent as determined by the absolute count of objectives entered by entrepreneurs who defined core competence first. Thus, for the presentation of results in

Table IV.
Cross-tabulation of all results from Tests I and II

Objective type groupings and cohorts	Business ideation order result		Entrepreneur cohort			All cohorts (%)
	Core competence first (%)	Key market/key distinction first (%)	Arts entrepreneurs – Norway (%)	Tech entrepreneurs – United Kingdom (%)	Young entrepreneurs – South Africa (%)	
Objective type grouping: absolute # of observations						
Get	82	18	5	29	24	21
Give	77	23	13	19	32	26
Make	80	20	26	39	39	36
Live	64	36	56	13	6	16
Objective type grouping: relative # of observations						
Get	81	19	7	34	24	23
Give	79	21	17	16	35	28
Make	78	22	25	38	35	33
Live	65	35	52	12	6	15
Objective type grouping: majority determination						
Get	83	17	7	34	27	25
Give	77	23	13	20	32	26
Make	78	22	25	33	36	33
Live	65	35	55	13	5	15
Entrepreneur cohort						
Arts entrepreneurs – Norway	0.73	0.27	–	–	–	–
Tech entrepreneurs – United Kingdom	0.56	0.44	–	–	–	–
Young entrepreneurs – South Africa	0.83	0.17	–	–	–	–

Figures 2 and 7, we chose to present results using the majority determination when analyzing the main motivation of each entrepreneur.

Interestingly, three-quarters of our population do *not* end up being categorized as "GET." As opposed to an equal distribution of 25 per cent of the population to each objective type, we see that "LIVE" is 10 per cent below with 15 per cent and "MAKE" is 9 per cent above with 34 per cent. This suggests that a significant percentage of entrepreneurs do not have profitability as their primary concern, which may be inconsistent with how certain economists may envision a "homo economicus" entrepreneur, perhaps suggesting that some entrepreneurs may be more appropriately envisioned as "homo socialis" (Van Der Have and Rubalcaba, 2016).

RQ1b. How do these motivations and reasons vary between diverse cohorts of entrepreneurs?

More granular analysis, however, reveals that the individual participants in our study have a diversity and plurality of motivations when deciding to engage in entrepreneurship. This is evidenced by the fact that 74 per cent of the population entered more than one objective into the NME-TE, and 48 per cent entered more than one *type* of objective. Figure 4 presents our observations of these different objective type combinations. We find it especially interesting that we observed all 15 of the 15 theoretically possible objective type combinations[2]. This should demonstrate the complexity of reasons which motivate the individuals in our study to engage in entrepreneurship.

A total of 52 per cent of the participants in our study stated just one type of objective in engaging in entrepreneurship. Interestingly, among all of the entrepreneurs, the most frequently observed "standalone" objective type was "MAKE," whereas "LIVE" is most often observed in combination with other categories rather than its least entered type on its own. This hints that "LIVE" may be a strong secondary element to most motivations, but not a primary motivational objective on its own. On an absolute count basis, "MAKE" was the most frequently observed objective type. We find it interesting, and not entirely surprising, that these individuals who decide to be entrepreneur are also motivated by the creative act of making or starting something. However, this does speak to viewing entrepreneurship as a fundamentally creative act of making something which did not exist before.

When looking at an absolute count of the total objective types we observed, we notice several interesting differences between the cohorts. First, by a large degree and to a greater extent than observed in any other cohort, the Arts entrepreneurs stated "LIVE" objectives (56 per cent). We note that this objective type of "LIVE" within the cohort of arts entrepreneurs is the only objective type category containing more than 50 per cent within the entire study. Compare this to the "LIVE" objectives of technology (13 per cent) and youth (6 per cent) entrepreneurs, and a clearer picture of why artists are entrepreneurs emerges. Arts entrepreneurs are widely believed to be entrepreneurs out of necessity (Bennett, 2007, 2009; Breivik *et al.*, 2015). Interestingly, 32 per cent of objectives from youth entrepreneurs are "GIVE," which is higher than both of the other cohorts. We wonder if this is a reflection of demographics (idealistic youth) or culture.

RQ2a. Do entrepreneurs define their core competence or their key market/key contribution first?

We note that the majority of all three cohorts started their business idea by defining their core competence. This has significant implications for the discussions around resource versus market-based views of the firm (Barney, 1991; Prahalad and Hamel, 1990). While the strategic effectiveness of each respective view is outside the scope of this paper, it is interesting to note that the entrepreneurs in our study tended to, by a large majority, start defining their business from a resource-based or effectual (Sarasvathy, 2001) perspective.

RQ2b. How do the results from RQ2 vary between diverse cohorts of entrepreneurs?
When looking at the business ideation order by cohort, we note a few interesting things in our results. First, it appears that within our three cohorts, the young South African entrepreneurs tended the most (83 per cent) toward beginning their business idea by defining their core competence first. Conversely, the technology entrepreneurs tended to begin their business ideas with their core competence the least (56 per cent) compared to the other two cohorts.

RQ3. What is the relationship between the motivations and reasons that individuals engage in entrepreneurship, and whether they define their business with their core competence or their key market/key contribution first?
The cross-tabulation of results (see Figure 7) from RQ1 and RQ2 is more revealing. The tech entrepreneurs had the lowest tendency to begin their business ideas with their core competence (56 per cent), compared to the other two cohorts, and they had the highest tendency for "GET." It seems that this group has a higher tendency toward a causation perspective than the other cohorts, and a higher tendency to be "opportunity" entrepreneurs (Reynolds *et al.*, 2002). This may have a relation with a higher education, or a generally more ambitious motivation with regard to their entrepreneurship projects. Further analysis into this may be warranted.

We also observe that within our population, those participants whose objectives are coded as "LIVE" have the highest likelihood of defining their business beginning with the key market/key contribution (35 per cent). This contrasts to those participants whose objectives are to "GET," 82 per cent of whom approximately begin their business idea with their core competence.

We should note that while Figure 7 presents cross-tabulated results from the business ideation order and the majority determined objective types of entrepreneurs in our population, we also cross-tabulated results based upon the two other objective typing methods (absolute and relative counts) which can be seen in Table IV. We found little difference in the results, with only a shifting of ± 2 per cent between the core competence and key market/key distinction split.

Limitations and threats to validity
We recognize there are several limitations to our research design which could threaten the validity of our results. The first possible limitation concerns how the entrepreneurs have been instructed and trained to use the test environment. We have attempted to train the cohorts as similar as possible to eliminate bias. We also note that each education and training program they underwent occurred at different times and were spread out over different durations of time. The training has, if possible, been done by the same people, and the same presentations have been used. The support texts and videos used have been identical, although there is an option to get it translated to different languages. The education of the different entrepreneurs in relation to using the NME-TE, therefore, may have some small variations.

Second, the design for entering the "core competence," "key contribution" and "key market" in the NME-TE is organized with the "core competence" to the left, the "key contribution" in the middle and the "key market" to the right. Western people used to reading and writing left to right may, therefore, be skewed toward starting with the core competence. This is, however, the same for all three cohorts.

Finally, we tried to find three cohorts which satisfied our criteria and were significantly different from each other to satisfy conditions of theoretical sampling.

Readers should note that our sampling approach, which is guided by both opportunity and convenience, does introduce some extraneous variables which impact the results when comparing cohorts. We know that there are four dimensions which these cohorts vary over – location, vertical/sector and age. For example, all Young South African entrepreneurs are active in many verticals, whereas the technology entrepreneurs are concentrated in education technology and the arts entrepreneurs in the creative industries. Whereas the ages of these two latter cohorts vary widely, all of the South African entrepreneurs are under 35. We believe that the impact of these extraneous variables could be isolated and considered in future research designs.

Conclusions and implications for educators and researchers

Let's go back to the fictional tale of our lemonade entrepreneurs in Texas. What have we learned in our study that may be relevant to them?

First of all, we see that our suburban street is populated with all kinds of lemonade sellers. We have a Geraldine who wants to *get*, Ginnie who wants to *give*, Maggie whose motivation is to *make* and Lisbeth who just want to *live*. That is – we have all four of these motivations clearly present in our population of participants. So the idea that all entrepreneurs are profit maximizers, or *homo economicus*, looks unlikely.

Second – it is not quite so simple. There is a bit of Ginnie and Maggie in Geraldine, a bit of Maggie and Lisbeth in Ginnie and so on. Entrepreneurs do not have only one motivation, but most often a combination of several reasons and objectives for engaging in entrepreneurship and becoming entrepreneurs.

Third – where do entrepreneurs start during business ideation? Let's let Maggie represent "starting with the resources" as she begins with noticing that there is a lemon tree in the garden, and Lisbeth represent "starting with the market" as she may have scanned the hot, TX suburban environment and its thirsty inhabitants to determine the best revenue-generating opportunities to get her chocolate. Our study suggests that almost three-quarters of the population are like Maggie. In that respect, our study supports the resource-based view (Barney, 1991; Wernerfelt, 1984) and effectuation (Sarasvathy, 2001).

Looking at the motivation and the order of the business ideation elements together gives further insight. In lemonade terms, Lisbeth is twice as likely to contrive her idea from noticing a market opportunity as Geraldine, although both most likely will get their ideas from realizing that they have access to unique resources. Is it possible that when a participant's objective as an entrepreneur was to simply enable their living, that they are more likely to look to the market to improve the probability of success?

When defining different "types" of entrepreneurs and entrepreneurship, we believe our results show that understanding and incorporating their motivations may be important if we want to help them. In our population of participants, perhaps what primarily separates the arts entrepreneurs from other entrepreneurs is the fact that they more often than the other entrepreneurs engaged in entrepreneurship to "LIVE." Interestingly, this is consistent with a widely accepted definition of arts entrepreneurship as:

> a management process through which cultural workers seek to support their creativity and autonomy, advance their capacity for adaptability, and create artistic as well as economic and social value (Chang and Wyszomirski, 2015).

Further, university education has been argued to be an important factor in triggering the formation of creative businesses and supporting the development of the entrepreneurial skills (Fahmi *et al.*, 2016) such creatives need to align their motivations to "LIVE" with their motivation to "MAKE," the latter being a non-economic drive that has been

observed elsewhere in the literature (Comunian, 2009) and is also reflected in Chang and Wyszomirski's definition. The term social entrepreneurship, on the other hand, has partly been defined by the motivation for social gain (Omorede, 2014). We show that there may be elements of a "GIVE" or idealistic motivation in all kinds of entrepreneurship. Ginnie may be the social entrepreneur in the neighborhood, but do we really know that Maggie is not also motivated by some degree of idealism?

Now, imagine that we are tasked with trying to help Geraldine, Ginnie, Maggie and Lisbeth to become more successful entrepreneurs. We view motivations as a precursor to action. How can we help them change their actions if we do not know what motivates them? How can we change their motivations if they themselves cannot reflect and identify them? Do we really think that a training, development or education program for Geraldine can be identical to the one for Maggie?

Influential educational reformists (Dewey, 1997) have argued for the importance of reflective thinking in learning and called upon society to educate for this skill. If you recall, Step I of our NME invites the entrepreneur to reflect upon the purpose and motivations for starting a company and is consistent with the call for reflective practice. Given society's increased interest and investment in entrepreneurship education (Wenninger, 2019; Morris and Liguori, 2016), the results of our study may be of interest to those who find themselves in any position to help, train or otherwise educate an entrepreneur. The observed variation in motivation, both across and within cohorts, has a clear implication for educators: one size does not fit all. Understandably, there could be challenges in trying to educate tomorrow's entrepreneurs and improve their chances for success through a standardized, top-down approach.

For example, the field of arts entrepreneurship education has recognized that a more individualized and context sensitive approach is important and is proposed to be an essential aspect of entrepreneurial learning (Beckman and Essig, 2012; Toscher, 2019), whereas research examining the careers of creative graduates demonstrates there is variation within career patterns and trajectories based upon contextual factors such as individual disciplines of study and geographic location (Comunian *et al.*, 2011). While it may be practical, scalable and more convenient to teach a classroom of musicians about the business model canvas (Osterwalder and Pigneur, 2010) or business plans, our findings suggest that a more personalized, student-centered approach to entrepreneurship education may create a learning experience more resonant with the complexity of human motivation and objectives. Knowing why an individual does something may be an important factor in enabling those individuals to persist when the types of things they are doing are challenging.

Yet, we also found some of the differences between these individuals seem to be related to their cohort (e.g. whether they are a technology entrepreneur or an artist). For example, a group of artists may be more motivated to "MAKE" rather than "GET." We wonder, then, what safe assumptions those who design an education intervention can make about the entrepreneurs they are educating.

But what are the implications from our study for research and theory? First, our study shows the potential of using an NME-TE (or its equivalent) to make empirical observations of individual entrepreneurial subprocesses mentioned by Shane (2012) and move toward answering various research questions. We note that if the field of entrepreneurship research has a desire for normativity, as evidenced by Shane's assertion that textbooks often present strategic and temporally ordered approaches as "the best way" (Shane, 2012, p. 14), then the ability to make systematic observations with an NME-TE (or its equivalent) is a useful first step to eventually determine whether there actually is an optimal process, order or strategy for entrepreneurship. Thus, this research design is an example of a pre-requisite data collection infrastructure to gather systematic data necessary to engage in theory building activity

(Strauss and Corbin, 1998). Further, by linking such observations with temporal economic data (such as the financial performance of entrepreneurs which have used the NME-TE, which we note is available for all entrepreneurs who have used the NME-TE in Scandinavia), we believe further studies could help answer other fundamental normative questions in the field of entrepreneurship. This includes whether the mode of entrepreneurial logic (competence vs key market/key contribution) used to define a business idea has any influence on the financial success and survivability of an entrepreneurial project – is one mode more optimal than the other? Can research one day provide persuasive evidence as to where should entrepreneurs start? Further studies exploring these types of questions can add more empirical data to disciplinary perspectives which have been influential in the literature (Barney, 1991; Sarasvathy, 2001; Porter, 2008). We invite other interested researchers to contact us if they would like to explore our data set to address these types of questions.

While it is outside the scope of this current paper, we believe in-depth case studies of individual entrepreneurs within each cohort may help further contextualize our findings and their implications. For example, we wonder if performing a case study may help us further refine our theoretical understanding of entrepreneurial motivations and move beyond a simple four type "GET GIVE MAKE LIVE" typology to explain some of the hybrid, multiple-objective type entrepreneurs we observed. In other words, what could we learn by comparing those entrepreneurs who had only one objective type with those entrepreneurs with multiple objective types? To touch the surface of this potential, we have prepared Table V, in which we have purposefully sampled four entrepreneurs from a single cohort (arts entrepreneurs) with various objective-type combinations. This table points to how our current data may be helpful as a starting point in identifying potential cases to approach for future in-depth case studies.

Further, one way we could approach selecting these cases would be in conjunction with a validation instrument (Strauss and Corbin, 1998; Drost, 2011). This could be a

Table V.
The promise of using individual cases in further investigations

Entrepreneur	Cohort	Objective	Combination of objective types observed (Get Give Make Live)	Entrepreneurial logic test result
#8100	Arts entrepreneurs	"Culture for the people"	Give	Core competence first
#2642	Arts entrepreneurs	"To contribute to a sustainable world, be able to work where I want, income which gives freedom and opportunity to develop on my own terms, make a difference in the world, earn good money = freedom, good opportunities for the next generation"	Give Live	Core competence first
#8769	Arts entrepreneurs	"Create a creative center which inspires, earn money, enrich the community/district"	Give Make Live	Core competence first
#7686	Arts entrepreneurs	"A decent yearly income"	Live	Core competence first

survey instrument designed to effectively validate the fit of our inductive coding scheme typology to the individual entrepreneurs in our study in which they self-report and identify the objective for their venture by choosing among one or a combination of our four objective type codes: "GET GIVE MAKE LIVE." Based on these results, we could select individual cases which are more "extreme" (Creswell, 2007) to aid in an effective case-study design.

Other possibilities would be to use the NME-TE to cross-reference the "GET GIVE MAKE LIVE" categories with the other 24 elements in the NME, and, eventually as mentioned, with the financial performance for each project. This way it would be possible to learn more about the chosen business models and objectives of the different categories, and to see the co-variation and relationships between "GET GIVE MAKE LIVE" and financial success.

Notes

1. where $OT_{Rx,p}$ = relative value of an objective type x for participant p; $o_{n,x}$ = number of observed objective type entries for objective type x; $\Sigma o,p$ = sum total of number of observed objective entries for participant p; and the sum of $OT_{Rx,p}$across all four objective types for an individual participants is equal to 1.
2. Based on calculating the number of combinations without repetition for four objective types with 1, 2, 3 and 4 object types chosen using the following equation from combinatorial mathematics:

$$C_{n,k} = \binom{n}{k} = \frac{n!}{k!(n-k)!}$$

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