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Hiring the first employee: an international exploration on the considerations leading to job creation by the solo self-employed

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Abstract

The world needs more jobs to meet United Nations Sustainable Development Goal 8 and to keep up with expected population growth. Policymakers stimulate start-ups due to their expected job-generating effect. Despite the increased number of solo self-employed, percentages on graduation from small to larger enterprises are low. This study focuses on entrepreneurs who create jobs, and have passed 'the one-employee threshold'. What are the considerations of the solo self-employed when making the decision to hire their first employee? 27 Interviews were conducted with entrepreneurs in developed and developing countries. The analysis shows that solo self-employed have considerations about time, skills, trust and opportunities when hiring their first employee. The study finds evidence of effectual behaviour. Trust is important: trust in others (the first employee) and trust in yourself (becoming an employer). To stimulate job creation, policymakers should stimulate effectual behavior that enhances the self-efficacy of the solo self-employed.

Key words

Solo self-employment, hiring, job creation, employer, graduation, own-account worker.

1. Introduction

The success of an enterprise is not only related to the value it brings to its owner(s) and customers, but also to its broader societal value in the form of jobs. The world needs more jobs to keep up with population growth, and to meet Sustainable Development Goal 8 that promotes decent work for all (United Nations, 2015). There is an increase in the number of solo self-employed (Conroy & Weiler, 2016; Fritsch, et al. 2012; Henley, 2005), but percentages on graduation from small to large enterprises are low (Davis, et al., 2007; Gomez, 2008; Henley, 2019; Kraaij & Elbers, 2016; Mead & Liedholm, 1998). Knowledge on the transition of enterprises from solo self-employed to becoming an SME is currently lacking in the literature. Business research on the factors that influence job creation have mostly focused on determinations for job creation, by doing quantitative studies. We will show that this type of approach and perspective have led to mixed results. In our research project we explored whether existing research can be complimented by using two other perspectives: the starting motives of the enterprise and the forms of behavior logic related to job creation, and by using qualitative instead of quantitative data. By analyzing qualitative research data, we could not only explore whether these existing perspectives were relevant, but were also able to see whether other insights emerged by using the general inductive approach from the social sciences. In this study, we analyzed 27 interview transcripts, to answer the research question: *What are the considerations of solo self-employed entrepreneurs when making the decision to hire their first employee?*

In this introduction we will introduce the topic of the solo self-employed, job creation and passing the one employee threshold, and discuss the societal and academic relevance. In Section 2, we will show the results of a literature review on determinants for job creation. In Section 3, we will give an overview of the theoretical framework of this study by explaining the three perspectives we used in this project. Section 4 on methodology informs the reader on the research design, data collection and data analysis. Section 5 discusses the findings, leading to the discussion, conclusion and recommendations in section 6.

1.1 Societal relevance of job creation

Entrepreneurial success can be measured by the amount of profit for the owner, realization of the need for autonomy (Stel & Vries, 2015), and enabling entrepreneurship for others (Burke, 2011). Besides this, success can also be measured by the number of jobs created, as stated by Bosma et al. (2000, p. 17): “Where the profit measure is mainly an individual success measure, total employment created can especially be seen as success for society”. This importance of employment is of course not only emphasized by authors, but also acknowledged by international intergovernmental organizations such as the United Nations and the World Bank. Sustainable Development Goal 8 aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (United Nations – Sustainable Development knowledge platform, 2015). According to the World Bank (2018), 600 million jobs are needed by 2030 to keep up with population growth and good and inclusive jobs are considered the surest pathway out of poverty.

On various levels, from global to regions and cities, policy makers have turned to entrepreneurship to generate economic development (Audretsch, et al., 2007). Authorities from both developing and developed countries try to stimulate start-ups in particular, due to their expected job-generating effect.

1.2 The increase of the solo self-employed

The number of solo self-employed worldwide has increased substantially according to recent statistics. For example, in the United Kingdom the self-employment business ownership has

risen over the past years from 8% in 1980 to around 15% in 2018 (Henley, 2005). In Germany the number of self-employed rose from 3 to 4.2 million between 1991 and 2009 (Fritsch, et al., 2012). Non-employer firms comprise a large and growing share of United States businesses, which may have significant economic consequences (Conroy & Weiler, 2016).

For the rise of the level of solo self-employment, there are three general types of explanations, according to Fritsch et al. (2012). First, variations in the socio-demographic characteristics of a population, such as age structure (middle-aged), different rates of participation of males and females in the labor market, and level of education (higher educated). Second, changing attitudes of people towards entrepreneurship have modified the willingness of being self-employed. Third, changes in the economic environment or entrepreneurship-relevant policies may influence the costs and benefits of running a business and hence, influence the level of self-employment in society. Moreover, in the context of developing countries, due to the lack of proper jobs, a large group of the workforce is simply forced to become solo self-employed. These survival entrepreneurs are qualitatively distinct from their opportunity driven peers (Berner, et al., 2012). Also in developing countries the economic environment in combination with fiscal policies can create an entrepreneur out of necessity.

1.3 Solo self-employed as job creators

Policy makers stimulate start-ups due to their expected job-generating effect (Shane, 2009). For example, former United States President Obama signed laws such as the Small Business Jobs Act of 2010, which aimed to create jobs through promoting small businesses (Fairlie, 2017). However, research shows that few micro-businesses create jobs for others (Davis, et al., 2007; Henley, 2019).

In the context of developing economies, information on job creation and the ‘graduation’ of firms to a new class of employment size was systematically collected by Mead and Liedholm (1998). The authors found that graduation from no-employees to micro-sized companies to small-sized and then to medium-sized companies, hardly exists. Other studies on the subject in developing countries show similar results (Gomez, 2008).

In the context of developed economies, research on the economic importance of small businesses started when Birch (1979) claimed that small enterprises generate a disproportionate share of new jobs (Henrekson & Johansson, 2010). This is confirmed by recent research by Kraaij and Elbers (2016) who followed start-ups in the Netherlands over the course of four years and concluded that graduation - that is, growing to a size of ten or more - rarely occurred. They also found that only 8.3% of start-ups have created jobs over the course of three years.

In the context of skepticism about entrepreneurial start-up support strategies (Shane, 2009; Arshed, et al., 2014), these findings are important for policy makers. Specifically, strategies promoting start-up job-creation activity may prove inefficient in raising levels of economic prosperity if little attempt has been made to differentiate them based upon business type, location or characteristics of the founder (Henley, 2019). Policies will be more effective if they are re-assessed and reviewed in order to bring them in line with reality.

1.4 Hiring the first employee

The large numbers of solo self-employed make it a substantial group of potential job creators. If only a small percentage of them would hire just one employee, this would contribute significantly to lowering unemployment (Millán, et al., 2015a).

Focusing research on the hire of the first employee will lead to a better understanding of the growth of new ventures in general according to Coad (2017). Coad (2017) even states that the first hire constitutes the single biggest growth event facing any growing firm.

Désiage, et al, (2011) calls this transition *passing the one-employee threshold* for firms with no employees. “Once an entrepreneur has experience with running a business with personnel (e.g. experience with financial planning to pay a salary every month, experience with administrative burdens associated with employing personnel, etc.), the step to employing more personnel may well be smaller” (Millán, et al., 2015a).

The purpose of our study is to gain valuable understanding of the early stages of the process of job creation, based on interviews with entrepreneurs, by answering the research question: what are the considerations of the solo self-employed when making the decision to hire their first employee? Policies to stimulate job creation can be improved by having more insights about the considerations entrepreneurs have while creating their first job.

2. Literature review

This section provides an overview of empirical studies on the determinants of job creation, critically discusses their quantitative approaches, and explores the gap in the literature that our research attempts to fill.

2.1. Literature review on determinants of employment growth

Although policy makers stimulate start-ups due to their expected job-generating effect, we still lack knowledge about start-up hiring patterns and decisions (Fairlie, 2017). No new-firm start-up is the same and this dissimilarity of new enterprises affects their success. Empirical studies have analyzed factors determining employment growth in new enterprises. Entrepreneurship researchers examined determinants that could predict future success. According to Cooper et al. (1994) the strengths and weaknesses of the starters are also the strengths and weaknesses of their firms. A focus on studies that examine the determinants of performance metrics might be helpful (Sørensen & Chang, 2006).

Building further on the work of Stam et al. (2008) we have analyzed factors associated with employment growth. In a literature review of empirical studies several papers that analyze multiple factors associated with employment growth in new firms (including the solo self-employed) were studied. From all of these quantitative studies – summarized in Table 1 - we recognize 12 determinants that were scrutinized in both developing and developed economies. In the next section we divide those in three subsets. The first subset contains the fixed determinants which are given for any entrepreneur. Second, there are human capital determinants based on experience and education level. Third, we identify four determinants that are based on decisions made by the entrepreneur when starting the company. These studies are summarized in Table 1. A full meta-analysis of findings in the literature associated with employment growth in new forms is beyond the scope of the present paper.

Fixed determinants

The first subset are fixed determinants on employment growth, which contain the gender, age and minority ethnicity of the entrepreneur. With regards to gender, several studies have been conducted as is shown in Table 1. In most studies males have a positive relation with firm growth. Another fixed determinant is the entrepreneur's age. In literature on job growth,

two studies found no relationship between age and job growth while three more recent studies found a relationship in favor of middle-aged entrepreneurs. In 27 European countries an inverse U-shaped age effect applies to those entrepreneurs who aspire to hire workers (Kautonen, et al., 2014). "Ceteris paribus the most successful job creators appear to be in middle-age" (Henley, 2005). The third fixed determinant is whether the entrepreneur comes from an ethnic minority. Entrepreneurs from an ethnicity minority in the three studies based on United States and British databases is referenced as being non-white. Research shows mixed results because Fairlie showed that entrepreneurs with an ethnic background created more jobs in the US (Fairlie, 2017) while three other studies did not confirm these findings (Cooper, et al., 1994; Dahlgvist, et al., 2000; Henley, 2019).

Human capital determinants

The second subset contains determinants related to human capital. Economists describe the accumulation of human capital which examines variables such as industry experience, completed education and consequences for career paths (Becker, 1975). One's reasons for starting a business act as a bridge between one's abilities and the attainment of a goal, without which the person's ability is not brought to bear on the actions needed to reach the goal (Gartner, et al., 1994). This category contains the determinants about prior employment, entrepreneurial background and experience, industry experience and education. Only the study by Congregado (2010) notes a positive relation with entrepreneurial background (Congregado, et al., 2010). For other fixed determinants, the variety of studies point at insignificant relations.

Decision-based determinants

The third subset contains determinants that are related to decisions made by the entrepreneur while starting the company. Entrepreneurs can decide to fully commit their attention to the new enterprise and work fulltime in the enterprise. On the other hand, so-called hybrid entrepreneurs, choose to be more cautious and maintain other activities next to their enterprise and usually spend fewer working hours in the company (Folta, et al., 2010). The table shows a positive relation in all studies regarding time invested during the first period of the business and employment growth. However, contrasting evidence has been found on the relationship between having side-line activities at the start, the amount of starting capital and starting with one or more business partners.

Overall conclusion

Looking at the table, the overall conclusion can be drawn that consensus has not been found on most determinants. The exception is: "Time invested at the start". Reality is more complex than just a relation between two variables. The table above shows the contrasting evidence. Even in terms of gender, there is plenty of evidence of a positive relation but results are not as clear cut as they might be. In general, start-ups led by male entrepreneurs realize more job growth than those led by female entrepreneurs. This, however, does not imply that women are less capable entrepreneurs. Male entrepreneurs tend to take more risk and they also shed employees more easily than their female counterparts (Conroy & Weiler, 2016).

Table 1 Empirical studies on employment growth of new enterprises in several studies:

| <i>Categories</i> | <i>Determinants /factors associated with new firm growth</i> | (Liedholm & Mead, 1995) | (Cooper, et al., 1994)* | (Brüderl & Preisendörfer, 2000) | (Schutjens & Wever, 2000) | (Dahlqvist, et al., 2000) | (Bosma, et al., 2004) | (Stam, et al., 2008) | (Congregado, et al., 2010) | (Kraaij & Elbers, 2016) | (Fairlie & Miranda, 2017) | (Dvouletý, 2018) | (Henley, 2019) | <i>Specific research on determinant</i> | <i>General view</i> | |
|---|--|--------------------------------------|-------------------------|---------------------------------|---------------------------|---------------------------|-----------------------|-----------------------|----------------------------|-------------------------|---------------------------|-----------------------|-----------------------|--|---------------------|--------------|
| <i>Countries analyzed/ time period/ method:</i> | | Africa and Caribbean; 1985-90; quant | US; 1985-1987; quant. | Germany; 1986-1990; quant. | NL; 1994-1997; quant. | SW; 2002-2011; quant. | UK; 1994-1997; quant. | NL; 1994-1999; quant. | EU; 1994-2001; quant. | NL; 2008-2011; quant. | US; 2004-2011; quant. | EU; 2005-2015; quant. | UK; 2002-2011; quant. | Research by | | |
| Fixed determinants | Gender (male) | + | + | + | | + | + | 0 | 0 | 0 | + | | + | (Klapper & Parker, 2011) (Conroy & Weiler, 2016) | + | Inconclusive |
| | Age of entrepreneur | | | | 0 | | 0 | + | | - | | Inverse U-shape | + | (Kautonen, et al., 2014), (Henley, 2005) | Inverse U-shape | Inconclusive |
| | Minority ethnicity | | - | | | - | | | | | + | | - | | | Inconclusive |
| Human capital determinants | Education | + | + | 0 | 0 | | 0 | 0 | + | 0 | 0 | + | + | (Van der Sluis, et al., 2008) | + | Inconclusive |
| | Entrepreneurial background (e.g. parents) | | 0 | | | | | 0 | + | 0 | | | 0 | (Sørensen, 2007) | 0 | Inconclusive |
| | (Prior) employment | + | | | | | | | + | 0 | | | | (Dvouletý, et al., 2018) | + | Inconclusive |
| | Experience as an entrepreneur | + | | 0 | | + | 0 | 0 | | 0 | | | + | (Stuart & Abetti, 1990) | + | Inconclusive |
| | Industry Experience | | | 0 | | | + | 0 | | | + | + | + | (Cowling, et al., 2004) | + | Inconclusive |
| Decision-based determinants | Time investment start | + | | | | | + | | + | + | | + | | | | Conclusive |
| | Hybridity (sideline activities) | + | | | | | | | | 0 | | | | (Melillo, et al., 2013) | - | Inconclusive |
| | Start capital | | + | + | 0 | | | 0 | | + | + | | + | | | Inconclusive |
| | Business partner | | + | 0 | + | | | 0 | | 0 | | | | | | Inconclusive |

*) Results confirmed in (Dahlqvist, et al., 2000)

2.2 Quantitative and qualitative approaches

Next to the lack of consensus, those who conduct inquiries of the kind summarized in Table 1, are aware that statistical associations do not prove causal relationships. There is common use of the statistical terms ‘determinants and effects’ with reference to factors associated with firm growth, which can be confusing for policy makers less familiar with the conventions of regression analysis (Stam, et al., 2008). New firms are complex adaptive systems in which complex feedback effects and path dependences are at work (Fuller & Moran, 2001; Garnsey, et al., 2006). Causal factors are interactive and involve feedback, which is difficult to capture through associations (Stam, et al., 2008).

Although some caution is warranted in interpreting the studies presented in table 1, they still represent an important step towards better understanding the determinants of entrepreneurs making the decision to take the leap from non-employer to employer firms. More research on the important topic of job creation by entrepreneurs is clearly needed (Henley, 2019). In this paper we explore an additional approach.

2.3 Academic relevance of our study

Although we are not the first to investigate the hiring of the first employee (Carroll, et al., 2000; Mathur, 2010; Millán, et al., 2015b;), we make a contribution to this literature by looking at the subject from a different angle. To our knowledge no qualitative research has been done where entrepreneurs were asked what their considerations were at the particular point in time when they decided to actually hire their first employee. This requires a qualitative approach as suggested by Edmondson (Edmondson & McManus, 2007). Edmondson and McManus warn that problems can arise when researchers collectively use only qualitative or quantitative methods. Using qualitative data in addition to the already existing quantitative data can help to identify patterns in the data and lead to more convincing results (Perry, et al., 2012). We have interviewed 27 entrepreneurs from all over the world in depth.

Moreover, in this study the focus is not only on the background factors of job creation, it also focuses on the *decision* of entrepreneurs to hire their first employee. Entrepreneurs must frequently make decisions under conditions of particularly high uncertainty (Schumpeter, 1934). Studies have typically found that entrepreneurs deviate significantly from purely rational models of decision-making when assessing the likelihood of achieving success with their ventures, with success typically defined as the survival, growth and profitability of the entrepreneurial venture (Baron & Ward, 2004). During the decision-making process, first the entrepreneur gathers information and considers the consequences. If we knew what these considerations are for entrepreneurs at that specific point in time, we know what made them decide to hire. To know what considerations entrepreneurs have while deciding, we have to ask the entrepreneurs who actually made it passed this threshold to go back to that moment in time and describe these considerations.

Since this is a preliminary study, we are also exploring relevant (theoretical) entrepreneurial perspectives that might give us systematic insight in the considerations behind the decision-making process by the entrepreneur. In this paper we present and try three perspectives to see which one proves to be the most relevant and provides the best insights, as described in Section 3. Additionally, an inductive approach and open coding of the data might lead to additional insights about job creation decision processes, that were not part of the existing theoretical perspectives, as explained in Section 4.

3. Theoretical framework

In this section we summarize the three different lenses or perspectives that might give us systematic insight in the rationale behind the decision-making process by the solo self-employed when hiring his/her first employee. In this preliminary study we explore which of these perspectives are valuable for our analysis. First, we will use the perspective of the determinants of job creation, as has been discussed in Section 2. The second perspective is based on the starting motives to become an entrepreneur. From the literature we deduced three main starting motives, opportunity-driven entrepreneurs, the lifestyle entrepreneurs or the entrepreneurs who started out of necessity or even to survive in life. The third perspective offers recent theoretical views on behavioral logic underlying the entrepreneurial process: causation, effectuation and bricolage. These perspectives are summarized below:

3.1 Perspectives on determinants of job creation by new firms

Concerning the first perspective, in the literature review section we have given an overview of the determinants of factors that have been researched in Table 1. This study will contribute to existing research on the determinants for job creation. Firstly, it will help to better understand these factors. The interviews will provide us with richer information, will help us to zoom in on these factors as part of the considerations, and will add new insights to the already existing results. Secondly, it might validate the existing results by looking at the same determinants, but by analyzing qualitative interview data in order to add value to the large amount of quantitative studies that have already been carried out in this field of research.

We analyze whether the above-named factors surface in the interviews and how they come up. For example: is the lack of experience in the industry or as an entrepreneur mentioned in the interviews as being part of the considerations? Is the entrepreneur considering things related to one or more of the determinants while deciding to hire the first employee? Eventually, how and when underlying determinants are mentioned by the entrepreneur, might add to the insights in the already existing quantitative studies presented in the literature review.

3.2 Perspective on motives for starting the business

The second perspective is on how the motives for starting a business relate to the considerations for hiring the first employee. Examining the reasons to start a business will allow us to better understand the role of human capital in entrepreneurship (El Shoubaki, et al., 2019).

There has been a debate whether motives influence future growth. Birley et al. (1994) took into account multiple motivations in the start-up period. A cluster analysis was used to provide a classification of founder “types.” They found that while individuals may have significantly different reasons to start a business, these reasons have minimal influence on firm growth. Renko et al. (2012) stress the importance of distinguishing between different reasons to start a business because they will affect entrepreneurial behaviors in different ways, which was recently confirmed by de Vries et al. (2019). Further research showed that motives that first led to the start of the business usually continue to influence later stages of the entrepreneurial process (Carsrud & Brännback, 2011; Krueger Jr, et al., 2000). In conclusion, the position that motives influence future growth has the most support in the literature.

Not all of those who become entrepreneurs respond to their environment in a uniform way. Some respond to a perceived market opportunity or desired lifestyle while others are forced into starting a business due to unfavorable circumstances. Based on this reasoning, three motives of the solo self-employed to start a business are distinguished in this study: out of opportunity, out of necessity (Stel & Vries, 2015) or as a lifestyle choice (Henderson, 2002).

Opportunity-driven entrepreneurs

In the first case, opportunity-driven entrepreneurs are individuals who started a business because they saw a profitable business opportunity. These entrepreneurs seek to create and scale up businesses. He or she will drive productivity growth, create new employment, increase innovation, promote business internationalization, and achieve economic growth (Guttermann, 2018). The goal of the entrepreneur while launching the ventures is to reach the point of “scale up.” Common goals and activities associated with the launch phase include market disruption and penetration; gaining access to capital and markets and mentorship opportunities. For (regional) policymakers this appears a particularly desirable form of entrepreneurship due to their aspirations for economic growth?.

Necessity entrepreneurs and survival entrepreneurs

In the second case, the necessity-driven entrepreneurs, the person became self-employed because of a lack of alternative employment options. Necessity entrepreneurs are forced into self-employment because of either few or unsatisfactory wage-and-salary options: they likely have less education and lower incomes and their ventures have lower prospects for growth (Román, et al., 2011; De Vries et al., 2019).

In the context of developed countries necessity-driven entrepreneurs can be ‘dependent self-employed’: self-employed workers who carry out the same tasks for their client firm as they did before when they worked for the same firm as an employee (Stel & Vries, 2015). Their job has not essentially changed but their employment protection is lower than when they were employees. An additional advantage for the client firms (former employers) is that they do not pay social-security contributions.

Entrepreneurs in the context of the developing world are called survival entrepreneurs (Berner, et al., 2012). Lacking a social safety net means that without an income, there is no food on the table for themselves and their families. These entrepreneurs face barriers to growth (Kraaij & Molenaar, 2017) and policy makers should be aware that there is a fundamental difference between the survival logic and the growth logic (Berner, et al., 2012). It is stated that new businesses that are motivated by weak job prospects in the traditional wage-and-salary employment sector will be unlikely to generate jobs, weakening the link to regional economic growth (Stephens & Partridge, 2011; Low & Weiler, 2012). If this is the case, perhaps it does not matter why entrepreneurs start, because those who are successful might grow and hire.

Lifestyle entrepreneurs

The third start-up motive is that of a fast-growing group in the developing and developed world of solo self-employed choosing to become an entrepreneur as a lifestyle choice (Henderson, 2002). Lifestyle entrepreneurs start a business not for economic rewards but mainly for a different kind of pay-off: the opportunity for a better life (Markantoni, et al., 2014). The entrepreneur creates a business with the purpose of altering their personal lifestyle and not for the sole purpose of making profits. A lifestyle entrepreneur focuses more on the life rewards provided to people that enjoy and generally have a passion for what they are doing. In the literature, it was theorized that lifestyle entrepreneurs rarely have growth ambitions for their firms, and also that these firms hardly show any actual growth (Masurel & Snellenberg, 2017).

The question why people start a business and how their reasons affect the mechanism that translates into entrepreneurial success is of interest to firm stakeholders such as governments and funders (Hessels, et al., 2008). Regarding the last two categories of entrepreneurs, the

question arises: do the solo self-employed with necessity or lifestyle motives turn into employers and create jobs?

3.3 Perspective on behavioral logic of entrepreneurs

Over the past two decades, some important theoretical perspectives have emerged to describe the logic and behavior underlying the entrepreneurial process (Fisher, 2012). These approaches, which contrast with the more traditional models of entrepreneurial behavior, have broadly been referred to as the “emerging theoretical perspectives” for entrepreneurship research (Eisenhardt, et al., 2010). These new theoretical perspectives have largely sought to describe the differences between the traditional approach to entrepreneurship - called the “causal approach” by Sarasvathy (2001) - and two alternative approaches: effectuation (Sarasvathy, 2001) and entrepreneurial bricolage (Baker & Nelson, 2005). These alternative theoretical perspectives for describing entrepreneurial action suggest that under certain conditions, entrepreneurs take a different route to identifying and exploiting opportunities (Fisher, 2012).

Causation

Causation is the term used by Sarasvathy (2001, 2008) to describe a traditional perspective on entrepreneurship. Causation indicates that entrepreneurship is a linear process (Baker, et al., 2003): an entrepreneur decides on a predetermined goal and then selects between means to achieve that goal (Sarasvathy, 2001). The factors that form part of the explanation of the entrepreneurial process include the identification and evaluation of objective opportunities (Shane & Venkataraman, 2000) as well as the analysis of alternative means to fulfill goals while accounting for environmental conditions that constrain the possible means (Sarasvathy, 2001). Entrepreneurs set goals and establish plans to concretize their intentions and attract resources (Katz & Gartner, 1988). Criteria for choosing between means usually involve maximizing the expected returns in terms of predetermined goals – such as whether to hire the first employee - and then select between means to achieve that goal (Sarasvathy, 2001).

Effectuation

Effectuation is described by Sarasvathy as “a logic of entrepreneurial expertise, a dynamic and interactive process of creating new artifacts in the world” (2008). The theory suggests that under conditions of uncertainty, entrepreneurs adopt a decision logic that is different to that explicated by a traditional, more causal model of entrepreneurship. Effectuation dictates that in highly uncertain and dynamic environments, target customers can only be defined ex post through whoever buys a product or service. Goals change and are shaped and constructed over time and sometimes they are formed by chance. Instead of focusing on goals, the entrepreneur exerts control over the available set of means - the things within their control (Sarasvathy, 2001). The key factors that are part of the explanation for the role of effectual logic in entrepreneurship include (1) starting with means as opposed to establishing end goals; (2) applying affordable loss instead of expected return when evaluating options; (3) leveraging relationships instead of competitive analysis when assessing relationships with other individuals and organizations; and (4) exploiting instead of avoiding contingencies (Sarasvathy, 2008). Starting with means describes how entrepreneurs make important decisions by focusing on the resources under their control thereby asking “Who am I?”; “What do I know?”; and “Whom do I know to uncover opportunities?” rather than focusing on a predefined end goal. In the context of passing the one employee threshold questions could be: “Do I see myself as an employer?”; “Am I a capable employer?”; and “Whom do I know who can do the jobs that need to be done?”

Bricolage

Entrepreneurial bricolage is the third entrepreneurship theory that could provide a lens for our study (Baker & Nelson, 2005). The term “bricolage” can be defined as “making do by applying combinations of resources at hand to new problems and opportunities” (Baker & Nelson, 2005, p. 33). The concept was originally introduced by the anthropologist Levi-Strauss (1966) to distinguish between the actions of an engineer and the actions of a “bricoleur” or handyman. While the engineer focuses on gathering tools and materials for an intended design, the bricoleur chooses instead to make do with whatever material is at hand. By making do with what is available, an entrepreneur can leverage physical, institutional and/or human resources in novel ways. In the entrepreneurship literature, bricolage has been used to conceptually explain market creation (Baker & Nelson, 2005) and emerging firm growth (Baker & Nelson, 2005). The theory of entrepreneurial bricolage suggests that the patterns that an entrepreneur adopts with respect to enacting or testing and counteracting limitations will shape the relationship between bricolage activities and firm growth. Bricolage activities can enable entrepreneurs to overcome resource constraints, but they can also lock the firm into a self-reinforcing cycle of activities that limit growth.

In this study we draw on Fisher who assessed whether causation, effectuation or bricolage are useful theories for explaining the action and behaviors of entrepreneurs (Fisher, 2012). Fisher studied six successful new enterprises and assessed them based on the three different theories underlying behavioral logic. Results showed patterns underlying entrepreneurship for these three theories. We have adjusted his framework to the question of hiring the first employee. A number of literature streams apply the effectuation concepts to aspects of entrepreneurship (Alsos, et al., 2019), but little is known about the behavioral theories with regard to the hiring process. In the analysis of the interviews we have conducted, we evaluated to see whether such behaviors underlying the theories of effectuation, causation, and bricolage are observable. The interviews might provide some evidence that a theory might be relevant for a hiring decision and therefore be a starting point for policies. The individual actions that underlie each of the theories were identified by Fisher (2012). These actions (i.e., individual behaviors), related to considerations in hiring the first employee are summarized in Appendix 1.

4. Methods

In this section the research methods will be explained. These were chosen to provide the best possible insights about the considerations that solo self-employed entrepreneurs have when they make the decision to hire their first employee. Discussed below are the research design, strategy, sample, data collection, data analysis and the strengths and limitations.

4.1 Research design

Our literature review showed that quantitative research designs led to mixed results on finding determinants for job creation. The present study has tried to contribute to these debates by using a qualitative research design to trace the reasons why solo self-employed entrepreneurs decide to hire their first employee. We expected that in depth-interviews with entrepreneurs who actually passed this threshold - asking them to go back to that moment in time and describe the considerations they had while deciding - could lead to very rich information such as reveal considerations, expectations, doubts that would be missed by using statistical databases only. Because the analysis of qualitative data is less common in business research, our research design employed social science research methods and software as well.

4.2 Research strategy

The research data consisted of transcriptions of semi-structured in-depth interviews with entrepreneurs. Using interviews as a research strategy with this sample provides advantages and disadvantages.

Interviews as research instrument allowed the researchers to ask open ended questions in which the entrepreneurs were able to speak freely about their considerations when creating their first jobs. Interview transcripts are well suited to take into account the role of ideas, particular circumstances, context and so on that might be missed by using existing large quantitative datasets or having fully structured questions with pre options as answers (Creswell, 2014).

Due to the small size of the sample and the focus on the considerations of entrepreneurs, the possibilities to relate these considerations to background information, such as age, country and industry of the entrepreneur, or comparing them with entrepreneurs without employees, were very limited in this stage of the research project.

4.3 Data collection

The participants of our research were entrepreneurs who started as solo self-employed and had hired at least one employee. Our aim was to create an international sample of entrepreneurs, both from developed and developing countries, and from various industries, to create a unique inclusive collection of research data. The participants were initially found in the international network of lecturers, international students and students with migration backgrounds at The Hague University of Applied Sciences in the Netherlands.

The interview guide consisted of a set of questions in two categories: structured with pre-defined options on background factors and open questions about considerations of hiring the first employee. All interviews were eventually structured around this question: "Let's go back to the time just before you hired your first employee. What was your main consideration at that point in time?". The research assistants were instructed to keep on discussing the considerations in depth with the entrepreneur. The interview guide was tested in 2017 and further adjusted in 2018. Both the expansion of the data collection and the improvement of the interview guide is an ongoing process.

The research data of this study consists of 27 interviews conducted by our research team between March 2017 and May 2019, carried out by phone, Skype video calls, or in person in the Netherlands or during field trips. In total, 10 Female and 17 male entrepreneurs were interviewed and the enterprises operated in different sectors. Interviews took place with entrepreneurs from the Netherlands, Curacao, Malawi, Australia, United States, Armenia, Egypt, Germany, France, Spain, Iran and Bonaire. The language spoken varied from English to Dutch, Papiamentu, Arabic and Farsi. Interviews were transcribed in the spoken language and translated in English when applicable. Data analysis took place in English.

All research team members, including students, were trained before conducting interviews. Entrepreneurs gave their informed consent to use the interview transcripts as research data for this project. When necessary, data was anonymized.

4.4 Data analysis

In this preliminary study, a combination of an inductive and deductive research approach was chosen, aimed at testing existing perspectives from business research with our data, and being open for new perspectives as well.

The code book used to analyze the transcriptions was created by the research team. The deductive elements of the code book were based on the theoretical perspectives as explained

in section 3 of this chapter: 1) the determinants: fixed, human capital and decision-based determinants, 2) the motives to start an enterprise: growth oriented, necessity driven/survival, and lifestyle, 3) theories on the behavior of entrepreneurs: causation, effectuation, bricolage.

Besides the closed coding based on the literature, inductive coding of the interview transcripts also took place to let objectives or themes emerge from the data. ATLAS.ti has been used to group, sort and structure the data and to code it in a systematic way. Quotations were exported for each code, and tables were created that made visible which themes related to the perspectives that were mentioned by the respondents.

Transcripts of personal interviews were read closely, re-read several times, and coded using an open system, meaning that anything relevant to our research was coded, in addition to the original code book. After rereading the data, the open codes were axially coded. This meant that certain codes having to do with the same phenomenon were coded with the same axial code. From these codes, certain themes emerged, which will be mentioned in the findings section. Peer researcher checks during all stages of the research project took place to increase reliability (Thomas, 2006).

4.5 Limitations

Limitations of this research are related to the small number of participants, student assistants and their networks, semantic interpretations, sample composition and a possible recall bias.

The number of respondents is small, 27 interviews, which might influence the analysis. The student assistants that interviewed most of the respondents, were trained by the researchers, but were less knowledgeable about the topic and not of all them had good research skills. Due to this some data was left out of the analysis because of lesser data quality. Some respondents were interviewed by relatives of student assistants. Although this might lead to bias on one hand, on the other hand it increased the trust in the interviewer, which suggests that respondents were more willing to admit their real considerations, instead of providing socially accepted answers to a stranger (Seidman, 2006).

The research data is not representative for all entrepreneurs. But in the end, the research data consisted of a very broad variety of developed and developing countries, nationalities, and industries. One barrier was the distinction in meaning of the semantical interpretation of the word 'consideration'. Unfortunately, language is not always precise, and creates the opportunity for confusion. Some interviewed entrepreneurs had a different semantic interpretation as the one we had intended, e.g. what kind of employee do I consider hiring. Because only entrepreneurs were interviewed that actually hired their first employee, we could not compare their transcripts with those of entrepreneurs that decided not to hire. We should be careful generalizing the results of the present study to the population of non-hiring entrepreneurs. Probably the most important limitation of this study is the classic recall bias. Recall bias is a systematic error caused by differences in the accuracy or completeness of the recollections retrieved ("recalled") by study participants (Last, 2000). Do the respondents have a good recollection of their actual considerations at that time? Being an explorative ongoing study on entrepreneurs' considerations, this article provides a first analysis of results. Both the data collection and analysis methods will be further developed in the coming years.

5. Findings

This section will show the empirical findings about the considerations of entrepreneurs to hire their first employee while Section 6 will further discuss these. Because this is an on-going research project, the scope and focus of this section is on the preliminary results. The deductive analysis of the interview transcripts has led to findings related to the behavioral theories on causation, effectuation and bricolage. Also, from the inductive coding procedures we will show the themes that have emerged. Claims from deductive analysis on the determinants of job creation and motives for starting the business, or a comparison of hiring considerations of entrepreneurs from different types of countries or other background factors, could not be fully included due to a lack of data in this stage of the research. The deductive findings (on determinants, motives and behavior logic) and the inductive findings are summarized below.

5.1 Determinants for job creation

Our current research data does not allow for a comparative analysis of background factors in relation to the decision and the considerations of the solo self-employed entrepreneurs to hire the first employee. However, while analysing the interview transcripts, some of these background factors emerged in another way: the entrepreneurs considered these as valuable characteristics of the first employee: time the employee could spend working for the enterprise, and also the gender, industry and education level of the employee. According to the interview respondents, these factors influenced the decision whom to hire. The quotations below illustrate these considerations on gender and age:

“I do not trust men, so I hired a woman whom I have known for years”

“Flexibility is what I consider one of the most important things I look for in the employees. You will find out soon enough that you have to work with young people”

5.2 Motives to start the enterprise

Our current research data does not allow for a comparative analysis of motives to start the enterprise in relation to the decision and the considerations of the solo self-employed entrepreneurs to hire the first employee.

Within our group of respondents, two survival entrepreneurs from developing countries that have started a business to stay alive were ill themselves or needed time to take care of family members that were ill. In their considerations the first employee could only be hired when they were absolutely sure that this employee could be paid, otherwise it would create poverty. These survival entrepreneurs showed to be more risk-averse than the other entrepreneurs in our sample.

5.3 Behavioral logic: causation, effectuation and bricolage

Findings of the deductive analysis on the entrepreneur behavior based on theories on causation, effectuation and bricolage will be shown in this section. Our analysis of the interviews disclosed that all three types of behavior were mentioned by the entrepreneurs, as being part of the considerations to hire the first employee. Effectual considerations were mentioned the most, closely followed by bricolage. Causational considerations were rarely mentioned.

According to our data, effectual considerations were mentioned by half of the respondents. The circumstances and possibilities changed and the entrepreneurs adapted to these. ‘Affordable loss’ and ‘flexibility’ were elements of effectuation that stood out. Affordable loss means that the entrepreneur only commits limited amounts of resources to the venture at a time. One entrepreneur said:

“In a certain month, you can think: yes I really need an employee. But there are also months in which you think: it will be fine if I do this on my own”

Flexibility means that the entrepreneur responds to unplanned opportunities as they arise by hiring a new employee, as illustrated by this quotation:

“I choose to become an entrepreneur because I did not want to work under a boss, I absolutely did not want to become an employer. But life But life had some changes for me. I became a married woman and had a baby so I had to hire someone.”

“We have tried numerous things before we actually hired somebody but eventually we had to do it”.

Causational considerations were rarely mentioned by entrepreneurs. Only occasionally a rational choice type of reasoning was included in their considerations:

“That was the first personnel had some changes for me. I became a married woman and had a baby so I had to hire someone.”

Bricolage is making do by applying combinations of the resources at hand to new problems and opportunities. Our data showed that many entrepreneurs had the tendency to avoid hiring, but eventually found this the best solution:

“I had to hire to help me out. My business grew and my competitors have somebody who can professionally answer the client’s problem. I calculated what the effect was on my net return and developed a plan to hire a staff member.”

5.4 Results from the inductive analysis

The inductive analysis of the data showed other recurring considerations that entrepreneurs had for hiring. Trust, growth opportunities, time and skills were mentioned in several ways. Trust in him/herself was often part of the entrepreneur’s thinking about him/herself becoming an employer, and trust in the person that would be hired. Hiring often became necessary because of growth opportunities, customer demands, or wishes of the entrepreneur to spend time on family or other private matters. Skills were also part of considerations, when entrepreneurs found that they were lacking the necessary or useful skills themselves.

Trust

Trust was the most frequently mentioned theme in the interviews transcripts, considered by entrepreneurs as a prerequisite for hiring. Trust contains two elements: trust in others (your first employee) and trust in yourself (being a successful employer). The quotations from entrepreneurs below provide the best insights in this theme:

Trust in others as employees:

“I have problems with trusting other people. It is very difficult for me to trust someone not to do something crazy. I have put all possible effort into building my enterprise and I am of course very careful with that. I think that every entrepreneur knows how much blood, sweat and tears it takes to be an entrepreneur. Can you imagine that you give a person a lot of responsibility in your company, and you trust him fully, and that it still goes wrong eventually. That would definitely hurt”.

“I was certain I wanted to start for myself, but I was not convinced that I would be able to find conscientious employees, and this really led to doubt. I prefer to do everything alone, because then I really know everything goes well, but you can’t do everything alone. So, I was convinced that I needed to find conscientious employees. I want to build up a successful company of course, so this was of major importance to me.”

“For me my main consideration in hiring my first staff member was trust. My employees deal with cash money and when money is gone I have to compensate to Zoona. Therefore I need somebody whom I can totally trust. In this country that is difficult since people are poor. I do not trust men so it was a woman I have known for a year whom I have hired. At first I tried to hire somebody and gave her limited responsibilities with limited amount of cash. I checked every day very thoroughly if the lady did not hold back anything. Then I increased the amount. She did not cheat any time. Finally I gave her the full responsibility, but I still check every day.”

Trust in yourself as an employer:

“I choose to become an entrepreneur because I did not want to work under a boss, I absolutely did not want to become an employer.”

Time

Hiring an employee became necessary because the entrepreneur wanted to spend more time with family or do other private things.

“I tried to do the work on my own but I just could not manage it. My life was all about work, work, work.”

“My daughter has mental disabilities, which requires more time and more money to care for her.”

Opportunities

Hiring an employee became necessary because of growth opportunities and/or customer pressure.

“There were no personal reasons involved in hiring a new employee. As a result of the growth of the turnover, we had a shortage of personnel to realize more growth”.

“I was convinced that we could not say no to customers, otherwise we would possibly lose them. That is something you of course do not want [...] so I went looking for our first employee.”

Skills

Skills of the employee were also part of considerations. Hiring became useful because a new employee could provide skills the entrepreneur did not have

“A local employee could tell the visitors of the hotel something about the surroundings and the local habits.”

6. Discussion

6.1 Discussion of the results

The scope and focus of the findings and conclusion is on the preliminary results. The deductive and inductive findings are summarized below.

Firstly, our current research data did not allow for a full comparative analysis of background determinants in relation to the decision and the considerations of the solo self-employed entrepreneurs to hire the first employee. However, while analysing the interview transcripts, some of these determinants emerged in another way: the entrepreneurs considered factors - such as time the employee could spend working for the enterprise, and also the gender, industry and education level of the employee - as valuable characteristics of the first employee. According to the interview respondents, these factors were part of the considerations within the selection process, in which they chose who to hire. Compared to the existing literature on determinants, this might suggest further research on employees, additional to employers as a unit of analysis, because entrepreneurs seem to have sought for characteristics in employees that overlapped with determinants of the entrepreneurs themselves, such as education, time, gender and industry experience.

Secondly, our current research data also did not allow for a full comparative analysis of motives to start the enterprise in relation to the decision and the considerations of the solo self-employed entrepreneurs to hire the first employee. Within our sample of respondents, the survival entrepreneurs from developing countries were more risk averse in hiring employees, and this decision was also related to personal circumstances. This will be further researched in the next stage of this project.

Thirdly, the findings on behavioral logic suggest that causation, effectuation and bricolage are relevant for explaining decisions of the solo self-employed when creating their first jobs. All three types of behavior were mentioned by the entrepreneurs as being part of the considerations to hire the first employee. Effectual considerations were mentioned the most, closely followed by bricolage. Causational considerations were rarely mentioned. Effectual considerations were mentioned by half of the respondents. Effectual behavior meant in this context that when circumstances and possibilities changed, entrepreneurs responded with flexibility to these unplanned opportunities. Bricolage is making do by applying combinations of the resources at hand to new problems and opportunities. Our data suggests that many solo self-employed had the initial tendency to avoid hiring, but eventually found this the best solution.

Although it was expected that at least some of the solo self-employed would have had the goal to grow into a larger enterprise, from the deductive analysis we found no evidence that the opportunity-driven starting motive or causational behavioral logics have influenced considerations to hire the first employee. In none of the interviews the entrepreneur explained that he/she had the wish, the dream or the goal to become an employer with many employees as te intrinsic, explicit mission or vision: hiring became necessary during carrying out the business activities. The circumstances changed, and the entrepreneurs adapted to these.

The inductive analysis by open coding of the interview transcripts with entrepreneurs, showed other recurring considerations for hiring the first employee. Trust, growth opportunities, time and skills were mentioned in several ways. Trust in him/herself was often part of the entrepreneurs thinking about him/herself becoming an employer, and trust in the person that would be hired. Hiring often became necessary because of growth opportunities, customer demands, or wishes of the entrepreneur to spend time on family or other private matters. Skills of the employee were also part of considerations, when entrepreneurs found that they were lacking the necessary or useful skills themselves.

We conclude that the main answer to the research question ‘What are the considerations of the solo self-employed when making the decision to hire their first employee?’ is composed of two elements. First: the effectual behavioral logic of the solo self-employed was clearly visible in

our interview data. When circumstances and possibilities changed, entrepreneurs responded with flexibility to these unplanned opportunities and decided to pass the one-employee threshold. This was closely followed by bricolage behavior, making do by applying combinations of the resources at hand to new problems and opportunities. Second, our data suggests that the concept of trust is a prerequisite for hiring: as being part of considerations on trust in yourself as employer, and trust in the employees that might be hired.

6.2 Limitations and future research

This project contributes to the entrepreneurship literature by analyzing qualitative research data, that shows that theories on behavioral logic are relevant, and also highlights the concept of trust. Limitations of this research are related to the small number of participants, student assistants and their networks, semantic interpretations, sample composition and a possible recall bias, as explained in Section 4 on methodology.

Based on this study we have recommendations for future research. First, because we found a tendency to avoid hiring in our data, future research concerning behavioral logic should also include solo self-employed respondents that chose not to hire, to further investigate this. Second, our international sample of entrepreneurs, both from developed and developing countries, and various industries should be expanded to at least one hundred job-creating entrepreneurs. In this study the focus was on a first round of interviews with entrepreneurs, and an explorative analysis of their considerations for hiring the first employee. In the next phase of this project, the fixed factors will be incorporated and explored, such as country, sector, institutional settings and GDP. Understanding the way the external context influences considerations, might lead to interesting additional observations. Third, in addition to general qualitative techniques, those conducting the interviews should receive more training in semantics. To minimize recall bias the sample should only exist of entrepreneurs that made the transition from solo self-employed to employer in the last three years. Fourthly, the qualitative analysis was very fruitful and can be further strengthened by using a systematic grounded theory approach.

6.3 Policy recommendations

Ultimately the goal of this research project is to add necessary focus to future (regional) policies targeting job creation by the solo self-employed. Henley (2019) and others state that strategies which aim to promote more business start-up activity with little attempt to differentiate on the basis of sectoral differences (Dvouletý, 2018) or characteristics of the founder, may prove inefficient. Focus should be placed on the entrepreneurs with the most chance of success. We conclude from our literature review that there is no clear consensus on the determinants that predict success. Nor does the analysis of the qualitative data give a clear direction on who and what to differentiate.

Two policy recommendations might be made. Firstly, our research suggests that enhancing the effectual thinking of all entrepreneurs is a fruitful avenue for further exploration. Our research found that most entrepreneurs engage in using effectual thinking in their decision making. Secondly, the issue of trust was evident in our data, in two ways: as being part of considerations on trust in yourself as employer, and trust in the employees that might be hired. We advise policy makers to develop strategies to enhance the self-efficacy of entrepreneurs, and to focus on hinder and delay factors of hiring the first employee.

7. Conclusion

The world needs more jobs to meet the United Nations Sustainable Development Goals and to keep up with population growth. Policy makers stimulate start-ups due to their expected job-generating effect. Despite an increase in the number of solo self-employed, percentages on graduation from small to larger enterprises are low. Policies can be strengthened with more insights about the early stages of the process of job creation, in particular on hiring the first employee, a crucial step in the growth of enterprises.

The research question was: what are the considerations of the solo self-employed when making the decision to hire their first employee?

In the first part of this chapter we showed a literature review of empirical studies that focus on the determinants associated with employment growth in new firms (including the solo self-employed), including fixed, human capital and decision-based determinants. From these quantitative studies the overall conclusion can be drawn that consensus has not been found on most determinants, with the exception that time invested at the start of the enterprise was associated with employment growth.

In our research project we have explored whether existing research can be complimented by using two other theoretical perspectives: the starting motives of the enterprise and the forms of behavioral logic related to job creation. Furthermore, we have collected qualitative research data instead of quantitative data on entrepreneurship. By analyzing qualitative research data, consisting of 27 in depth-interviews, we were not only able to explore whether existing perspectives were relevant for job creation, but were also able to see whether other insights emerged, by using a general inductive approach from the social sciences.

The results of the research show that the effectual behavioral logic of the solo self-employed is relevant in the decision of hiring the first employee. Bricolage behavior, making do by applying combinations of the resources at hand to new problems and opportunities, was also referred to by the entrepreneurs. Our data also suggests that the concept of trust is a prerequisite for hiring: as being part of considerations on trust in yourself as employer, and trust in the employees that might be hired. The main policy recommendation is to take into account the effectual behavior of entrepreneurs, and to develop strategies to enhance the self-efficacy of entrepreneurs.

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Appendix 1: Behavior related to considerations in hiring the first employee

| <i>Motive</i> | <i>Analysis</i> |
|---------------|---|
| Causation | <p><i>Causation processes take a particular effect as given and focus on selecting between means to create that effect</i></p> <ul style="list-style-type: none"> • Considered and calculated the effect on the returns of the hiring the first employee. • Considers the effect of hiring on the written business plan • Organized and implemented control processes • Gathered and reviewed information about the labor market before hiring • Gathered information about competitors and compared their offerings • Considered the effect on the ventures written or verbally expressed a vision for venture • Developed a project plan in hiring the first employee • Wrote up a marketing plan for taking the products/services to market |
| Effectuation | <p><i>Effectuation is a process in which a set of means is taken as given, and the entrepreneur focuses on selecting between possible effects that can be created with that set of means</i></p> <p>“Do I see myself as an employer?”; “Am I a capable employer?”; and “Whom do I to do the jobs that need to be done?”</p> <p>Affordable loss:</p> <ul style="list-style-type: none"> • Commits only limited amounts of resources to the venture at a time. Seeks out ways of to avoid hiring an expensive employee. Considered limiting the usage of other resources than personal resources. <p>Experimentation:</p> <ul style="list-style-type: none"> • Considered changes the product or service substantially as the venture develops using the skills of the newly hired employee. <p>Flexibility:</p> <ul style="list-style-type: none"> • Responds to unplanned opportunities as they arise by hiring a new employee. • Adapts what they are doing to the resources on hand before deciding on a course of action. • Try to avoids courses of action that restrict flexibility and adaptability by rejecting courses of action that will lock them in. <p>Precommitments:</p> <ul style="list-style-type: none"> • Enters into hiring an employee only after prior agreements with customers, suppliers, and other organizations. |
| Bricolage | <p><i>Bricolage is making do by applying combinations of the resources at hand to new problems and opportunities</i></p> <ul style="list-style-type: none"> • The entrepreneur has considered trying to avoid hiring an first employee because he or she tried to solve the problem using existing resources. • Combines existing resources in creating solutions: Uses readily available goods, skills or existing contacts to create solutions to solve problems. • Uses existing resources (rather than hiring somebody from outside the enterprise). • Reuses resources for purposes other than those for which they were originally designed. • The entrepreneur experiments to solve problems (instead of trying to figure it out conceptually) • Tried or considered trying to manage with family members or friends and thereby avoiding hiring somebody: • Considered working around rules and standards (institutional environment). |

This table is based on Fisher (2012).