

The Influence of Age On Entrepreneurial Processes

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Abstract: Age was selected in order to investigate to what extent entrepreneurs in Germany tend to choose effectuation and causation in going through entrepreneurial process steps. Using data generated among university students from Germany no evidence was found that age has any influence on the decision to what extent effectual or causal approaches in entrepreneurial processes are chosen. Moreover, third factors such as the gender of a person could not be demonstrated as a potential influence on decision-making in entrepreneurial processes.

Key words

Entrepreneurship, entrepreneurial processes, national culture, future orientation, effectuation, causation

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1. Introduction

1.1 Entrepreneurship and Entrepreneurial Processes

Not only since the recent financial and economic crisis but already many years before entrepreneurship has become an object of study for researchers. When entrepreneurship is better understood it is possible to stimulate the setting up of new ventures and to offer them support. By doing so, the economy can be stimulated because entrepreneurship is the ability and willingness to perceive and create new market opportunities and to introduce them to the market (Wennekers & Thurik, 1999). This happens in combination with individuals who exploit these opportunities (Venkataraman, 1997). These individuals are said to own '*unique personality characteristics and abilities*' (Gartner, 1990, p. 16). In other words, entrepreneurship is important because it is a driving force that pushes economic activities forward. As a consequence, entrepreneurship contributes to the growth of GDP and employment. Besides, the implementation of innovations can also be related to entrepreneurship. Entrepreneurship results in cutting-edge innovations in the market (Baumol & Strom, 2007). Accordingly, they improve the life of people and lead to an increase in market activity and growth.

Within the field of entrepreneurship, lately, a more prominent role has been given to the research of entrepreneurial processes (Moroz & Hindle, 2011). There are generic and distinct processes. Generic processes are processes that are not classified as being only entrepreneurial while distinct processes can indeed be classified as only entrepreneurial. Thus, generic processes are rather general ones while distinct processes are rather specific ones. Four process models (Moroz & Hindle, 2011) are shown by Gartner (1985), Bruyat & Julien (2000), Shane (2003), and Sarasvathy (2001). In contrast to the others, the model by Sarasvathy (2001) focusses on generic and distinct processes. She provides insights on generic and distinct elements in entrepreneurial processes. She does so by looking at what makes entrepreneurs '*experts*' (Moroz & Hindle, 2011, p. 24) in their field through looking how they do it and what are teachable and learnable elements. Next to that, Sarasvathy (2001) also takes into account the '*dynamic, change-based nature*' (Moroz & Hindl, 2011, p. 24) of entrepreneurship and entrepreneurial processes. Hence, the process model by Sarasvathy (2001) adds a dynamic approach to them. Furthermore, the model by Sarasvathy (2001) confronts the concept of '*effectuation*' (Moroz & Hindl, 2011, p. 24) with the concept of causation in entrepreneurial processes. By doing so, she extends existing approaches. To explain shortly, effectuation means planning entrepreneurial processes without making a detailed plan. In contrast, causation means planning entrepreneurial processes with a detailed plan Sarasvathy (2001b).

It is not the only reason why the model by Sarasvathy (2001) got a lot of attention. Another reason is that it is in line with new theories. One of those theories is the bricolage theory by Baker & Nelson (2005). Simply explained, the bricolage theory deals with planning in terms of '*making do with what is at hand*' (p. 329), which refers to effectuation. Both Baker & Nelson (2005) and Sarasvathy (2001) deal with '*selecting between possible effects that can be created with that set of*

mean' (Sarasvathy, 2001b, p. 245) or in other words, managing limited resources in order to reach goals.

Another aspect in the field of entrepreneurship is the question whether entrepreneurs should engage in business planning or whether they should apply a flexible learning approach. The answer to this question is not an easy one since there are some additional factors that possibly play a role in choosing between one of the two approaches as shown by Brinckmann et al. (2010). For instance the '*stage of firm development (new or established firm)*' (p. 27), the '*business planning outcome vs. process (written plan or sophisticated planning process)*' (p. 27) or the '*cultural context (high or low uncertainty avoidance)*' (p. 27) have to be taken into account.

There are additional factors that influence whether entrepreneurial processes are effectual or causal. In particular, the cultural context has gotten a lot of attention. The cultural context can indeed be seen as such an influence. The reason for this concern is that the cultural context is a key influencer in determining the way people make choices and take actions. This influence on human choices and actions can directly be directed to an entrepreneur's choice of acting effectual or causal (Marsick & Watkins, 2001). This can occur through culture that shapes the way entrepreneurial processes are managed. For instance, culture can influence the identification of problems and their importance (Schwartz, 1999), the solution finding to those problems (Reed, 1996), the solution evaluation (Zilber, 2006), and the implementation of the solutions (Prasad & Elmes, 2005).

A closer look at national culture influence will be discussed in the following paragraph.

1.2 National Culture Influence

Culture is an aspect that can be very influential in determining characterizations of populations of countries (Hofstede, 1980). It is possible to take culture as an important aspect for choosing between causation and effectuation in entrepreneurial processes since entrepreneurs are affected by the national culture in which they have grown up and in which they do business. Culture sets up people's mind and distinguishes groups of people from another (Hofstede, 2001). It influences people in every aspect of their daily life and in every aspect of the human behaviour. Regarding culture, one distinguishes between informal and formal culture. Informal culture contains values that are taught in the home environment e.g. by family and friends (Li & Zahra, 2012). These informal cultural constraints, together with formal culture, can influence economic activities. In contrast, formal culture, as demonstrated by Hofstede (1980) and House's Global Leadership and Organizational Effectiveness (GLOBE) study, is taught by institutions.

The framework by Hofstede (1980) contributed to a great extent to the capability of comparing different national cultures with each other. However, his study is also seen critically. One of the critics is McSweeney (2002). He doubted Hofstede's assumption that all members of a particular culture are homogenous. Thus, there cannot be uniform cultures, in which all members have the same cultural attributes. For this reason, individuals cannot be entirely defined by their cultural background. It is criticized that Hofstede made his assumptions based on a sample that contained fully of IBM employees. All

in all, this IBM company culture cannot represent cultural values worldwide.

Robert House contributed his project Global Leadership and Organizational Effectiveness (GLOBE) study to the academic field. His project GLOBE study consists of data from 17,000 middle managers from 59 countries. All these data are summarized in 62 samples (House et al., 2005).

The GLOBE study differentiates between countries in terms of clusters for instance Anglo, Latin Europe, Nordic Europe, Germanic Europe et cetera.

The GLOBE study also differentiates between nine common cultural dimensions including future orientation. Future orientation is *'the degree to which individuals in organisations or societies engage in future orientated behaviours such as planning, investing in the future, and delaying individual or collective gratification'* (House et al., 2010, p. 118). In other words, future orientation is planning in terms of medium- to long-term success rather than only facing short-term successes. It is about spending money and to eventually making losses in order to be profitable in the future.

In terms of future orientation House differentiates between values i.e. how it should be, and practices i.e. how it is in reality. It is important to mention this aspect because values and practices can differ. Stating that future orientated behavior implicates an entrepreneur's choice between choosing for effectuation and causation does not need to mean that effectual or causal behavior is indeed to be observed.

This is what distinguishes the framework by House from the framework by Hofstede (1980). House uses both the value and practice perspective while Hofstede (1980) limits his framework to the value perspective. Combined with the flaws in the framework by Hofstede (1980) as criticized by McSweeney (2002) the GLOBE study by House will be preferred to the framework by Hofstede (1980). Later on in this paper the connection between the cultural dimensions by House et al. (2010), in particular the cultural dimension of future orientation, and the work by Wiltbank et al. (2006), in particular the term of *'prediction of the future'* (p. 9), will reveal another reason to use the GLOBE study by House.

Regarding future orientation Germany scores 5.23 points out of the maximum of 7 points on the GLOBE study scale by House. This high score could indicate a more effectual rather than causal behaviour in Germany. However, as for entrepreneurs there are different patterns visible different from culture. One of these visible patterns is the age of a person. The age can influence a person's expertise. This expertise can then influence someone's choice of acting effectual or causal due to the professional experience that is built up during the aging process (Bergmann & Sternberg, 2007; Dew et al., 2009).

1.3 Research Question

In this paper the influence of age will be dealt with in terms of starting a new venture and venture creation. It offers a novel view on how age can determine entrepreneurial process steps and an individual's choice of choosing between effectuation and causation.

This context leads to the following research question: To what extent does age influence the extent to which entrepreneurs make choices between effectuation and causation?

2. Effectuation versus Causation

2.1 Effectuation

Effectuation plans in terms of entrepreneurial processes can be described as emergent strategies, which are based on alternatives such as loss affordability, flexibility, and experimentation (Sarasvathy, 2001b, 2008). When following the effectuation plan entrepreneurs start with a general idea. In the following, the process to work towards this idea is executed by using the current resources that are available. Since there is no clear objective the process remains flexible so that it can react to contingency factors. As a consequence, goals emerge during the process (Harms & Schiele, 2012). Additionally, effectuation has its focus on *'selecting between possible effects that can be created with that set of means'* (Sarasvathy, 2001b, p. 245). The underlying assumption of the effectuation plan is that the future can be controlled but it does not need to be predicted (Sarasvathy et al., 2003). It is based on *'logic of control'* (Sarasvathy, 2001a, page 1), which means that *'to the extent that you can control the future, you do not need to predict it'* (Sarasvathy, 2001a, page 1). Effectuation is preferably chosen in cases that there are no pre-existent markets yet. Next to that, effectuation is to be applied in situations that are of an uncertain and / or unique character in which statistical interferences cannot be made (Sarasvathy, 2001a). In this kind of situation it is not possible to forecast the outcome of a single course of action. Sarasvathy (2001b) developed five behavioural principles with which one can analyse whether entrepreneurial processes are characterized by effectuation. The five principles are: 1) there is a set of given means, 2) the focus is on affordable losses, 3) strategic alliances and pre-commitments are emphasized, 4) environmental contingencies are leverages, and 5) an unpredictable future is sought to be controlled. To be more explicit, effectuation as operationalized by Sarasvathy (2001b) is described as a concept that is based on already existing resources that can be used instead of purchasing additional ones, a concept that accepts short-term losses in order to make medium- to long-term profits, a concept that seeks for strategic partners to become profitable, a concept that takes into account outside influences, and a concept that does not try to predict the future but instead accepts that the future cannot be predicted but can only be tried to be controlled at most.

One of these five behavioural principles, controlling an unpredictable future, can be found as well in the work by Wiltbank et al. (2006). To control an unpredictable future a transformative non-predictive control approach that *'transforms current needs into co-created goals with others who commit to building a possible future'* (p. 4) can be applied. Thus, this approach rather focusses on future events that can be controlled than on future events that can be predicted. Also strategic partnerships in order to reach goals are emphasized. Here a clear connection to the cultural dimension of future orientation by House et al. (2010) can be seen.

2.2 Causation

In contrast to effectuation, causation can be described as a *'goal-driven, deliberate model of decision making'* (Perry et al., 2011, p. 837). It is also described as a *'planned strategy approach'* (Ansoff, 1988; Brews & Hunt, 1999; Mintzberg, 1978). Causation relies on the *'logic prediction'* (Goel & Karri, 2006, p. 478), which means that it adopts *'a systematic acquisition and analysis of information within certain bounds'* (Goel & Karri, 2006, p. 478). Hence, *'to the extent that you can predict the future, you can control it'* (Sarasvathy, 2001a, p. 1). Additionally, *'causal processes take a particular effect as given and focus on selecting between means to create the effect'* (Sarasvathy, 2001b, p. 245). In other words, the better the future can be predicted the better it can be controlled. Furthermore, when choosing for causation goals are set and accordingly, they are tried to be reached by choosing one mean to do so. Thus, one clear direction is chosen to reach the set goal.

Entrepreneurial processes that are characterized by causation are best applied in environments that are dominated by 1) *'predictive rationality'*, 2) *'pre-existent goals'*, and 3) *'environmental selections'* (Sarasvathy, 2001a, p. 1). In addition, causation works best if it is applied in a 1) *'static'*, 2) *'linear'*, and 3) an *'independent'* environment (Sarasvathy, 2001b, p. 251). Hence, causation can be best applied in stable and predictable environments. Finally, decision-making criteria depend on the effect, which means that decisions are made based on the effect that the decision maker wants to achieve and the already available knowledge about possible means to achieve the effect. These means to achieve the wished effects can be described by *'who I am'*, *'what I know'*, and *'whom I know'* (Sarasvathy, 2001b, p. 258). Wiltbank et al. (2006) contributed the term of *'prediction of the future'* (p. 9). Prediction in this sense is *'a central issue in strategy making owing to the presumption that what can be predicted can be controlled'* (p. 2). The emphasis of this approach is to *'try harder to predict and position more accurately'* (p. 4). In other words, based on how the future is predicted entrepreneurial process steps will be planned in order to maintain control of the process. This leads to obligations, which lock entrepreneurial process steps into a planned strategy approach that will be followed throughout all process steps and which have a lack of flexibility.

In the next part hypotheses will be built. In the previous parts the influence of national culture, and the concepts of effectuation and causation were explained in details. However, in order to continue it is necessary to have a deeper understanding of the cultural dimension of future orientation as well.

As explained earlier future orientation is *'the degree to which individuals in organisations or societies engage in future orientated behaviours such as planning, investing in the future, and delaying individual or collective gratification'* (House et al., 2010, p. 118), which means that future orientation is planning in terms of medium- to long-term success rather than only facing short-term successes. It is about spending money and to eventually making losses in order to be profitable in the future.

The degree to which individuals are future oriented determines the way they regard entrepreneurial processes and manage them. Having a high score on future orientation means that

societies are more oriented towards the future, they prefer to save their money for the future, they are intrinsic motivated, they prefer long-term successes, and they regard material and spiritual success as two complementary parts. In contrast, having a low score on future orientation means that societies prefer to spend their money in the present, they are extrinsic motivated, they prefer short-term successes, and they regard material success and spiritual successes as two mutually exclusive parts (Ashkanasy et al., 2004).

The degree to which entrepreneurs are future orientated can also indicate their entrepreneurial propensity during their process of developing expertise, which leads them to act effectual or causal. In general entrepreneurial propensity increases continuously and reaches its peak between the age of 35 and 40. Towards the end of the working life entrepreneurial propensity decreases again (Bergmann & Sternberg, 2007). These older professionals are referred to as *'experts'* while younger professionals are referred to as *'novices'*.

2.3 Hypotheses

As for the hypotheses the focus will be on the relationship between the age, and the effectuation and causation share as generated from an experiment among student entrepreneurs in Germany. It is assumed that there is a relationship between the age, and the effectuation and causation share. The reason for this is that the level of an entrepreneur's expertise and his / her entrepreneurial propensity increases with his / her age. (Bergmann & Sternberg, 2007). Based on that it is assumed that the older the entrepreneur, the more effectual he / she is.

The dichotomy of effectuation and causation needs to be taken into account i.e. individuals can never be characterized as being effectual or causal only. They always behave both effectual and causal. What is different is that some individuals behave more effectual or more causal than others.

For this reason, the hypotheses will be:

H1₀: The older a person, the more the person will use causation.

H1_a: The older a person, the more the person will use effectuation.

3. Methodology

3.1 Method

Thinking-aloud is a method of individuals verbalizing thoughts without any reactions of their thinking while trying to solve a specific problem or answering a specific question. By doing so, thoughts that are expressed do not need to be explained or described (Ericsson & Simon, 2010; van Someren et al., 1994). All answers are recorded or written down unfiltered as they are expressed by the interviewee and let pass without any comment by the experimenter. As a result, the experimenter receives unfiltered responses that are not influenced by anyone in any way. Due to these unfiltered responses it is possible to recognize and analyse differences in human problem-solving strategies, and difficulties and confusion in given responses can

be identified. Moreover, it can be investigated how interviewees deal with the effects of instructions as given by the experimenter and other factors that could influence the problem-solving process (van Someren et al., 1994).

3.2 The case

Sarasvathy (2001a) confronted 27 entrepreneurial experts from 17 states in the United States of America with the problem of defining tasks that are involved in the process leading to discovering and creating new product markets. Their answers were recorded using the think-aloud method and later coded and analysed to show that they applied effectuation next to causation. As a result, it was found out that about 63 percent of the interviewees applied effectuation for more than three-fourths of the time.

Just like Sarasvathy (2001a) in this paper a study is done analysing the use of effectuation and causation among a group of people, in this case student entrepreneurs from Germany. Within one interview session the interviewees are confronted with ten problems by an interviewer. The ten problems are about opening a coffee corner in their university and represent the entire range from establishing in the market, designing products, and hiring staff to exiting the market. For answering the questions the student entrepreneurs are told to apply the so-called think-aloud method as formulated by Ericsson & Simon (2010) and van Someren et al. (1994). Later the recordings are coded and the answers are identified as being effectual or causal.

3.3 Sample

As already mentioned before the data sample that is used for the analysis was generated from an experiment among student entrepreneurs from Germany (n=20). They were chosen for this experiment to have a coherent sample that consists of interviewees with a similar educational background. This was done to ensure that each interviewee has the same comprehension of the problems that they were faced with. The sample was also chosen because the interviewees could reply to the problems in their native language that is German. By doing so, it was easier for them to express their answers especially if the answers were more complex and contained technical terms.

3.4 Analysis

The coding is executed according to pre-existing formulations (Dew et al., 2009; Read et al., 2009; Read, Song & Smit, 2009; Sarasvathy, 2001b; Sarasvathy, 2008; Sarasvathy & Dew, 2008; Wiltbank et al., 2006). The formulations are divided into two categories, effectual and causal. The answers that are given by the student entrepreneurs are compared to these formulations and accordingly, characterized as being effectual or causal based on their similarity to the pre-existing formulations.

Since the aim of the study is to investigate the nature of the relationship between the variables the hypotheses are tested in an exploratory kind of way. An exploratory research is chosen because the research itself represents a relatively novel cultural point of view to look at effectuation and causation. It offers a new angle. For this reason, it can be used as a ground work for

future research regarding effectuation and causation in terms of culture. It can be a guide that leads to future hypotheses (Field, 2009). Next to that, acting effectual and causal in entrepreneurial processes is a phenomenon that is persistent. Since exploratory research is appropriate for persistent phenomena exploratory research was chosen (Babbie, 2010).

As mentioned before the intention of the study is to investigate the nature of the relationship. In order to do so best and to test the hypotheses a bivariate correlation analysis is executed including the future orientation score for Germany for both values and practices since values and practices can differ, and the effectuation and causation share. Finally, a partial correlation analysis is made including a control variable, sex, to check whether a third variable has influence on the strength of the relationship.

By applying a bivariate correlation analysis it is possible to measure the strength of a relationship between two variables. Based on that it is to be seen whether there is a strong, weak, or no relationship between two variables. For doing so, a bivariate correlation analysis using Kendall's tau is chosen. Kendall's tau is a widely used measurement for relationships between two variables. One reason to use Kendall's tau is distribution of the data. The data in this study are non-normally distributed. They are non-parametric data. In order to use Kendall's tau this requirement needs to be fulfilled. Moreover, there are only twenty respondents. Kendall's tau can be used best for such small numbers of respondents (Field, 2009).

4. Results

Table 1: Descriptive

	N	Mean	Std. Deviation	Skewness
Age	19	27,16	3,91	,64
Share causation total	20	,61	,10	,22
Share effectuation total	20	,39	,10	,22
Valid N	19			

When looking at table 1 it can be seen that the data are skewed to the right. So the data are not normally distributed. The average effectuation share is smaller than the average causation share. So they tend to emphasize causation over effectuation. Finally, the standard deviation for both the effectuation and causation share is small, which means that the given answers by the student entrepreneurs did not vary to a great extent.

Table 2: Kendall's tau correlation age / share causation & effectuation

	Age	Share causation total	Share effectuation total
Age Correlation Coefficient	1,00	,086	-,080
Sig. (2-tailed)	.	,62	,65
N	19	19	19
Share causation total Correlation Coefficient	,086	1,00	-1,00**
Sig. (2-tailed)	,62	.	,00
N	19	20	20
Share effectuation total Correlation Coefficient	-,080	-1,00**	1,00
Sig. (2-tailed)	,65	,00	.
N	19	20	20

** . Correlation is significant at the 0.05 level (2-tailed)

What can be seen in table 2 is that the Kendall's tau correlation as measured for the relationship between age and causation ($\tau = 0,086$) is not significant. Based on that it can be concluded that there is no relationship between the age of a person and his / her choice of acting causal. The result is not statistically significant ($p > 0,05$). As for effectuation this result implicates that age has no influence on choosing to act effectual neither. The null hypothesis, $H1_0$, as well as the alternative hypotheses, $H1_a$, have to be rejected.

Table 3: Kendall's tau correlation age / share causation & effectuation

Control variable: Sex	Age	Share causation total	Share effectuation total
Age Correlation Coefficient	1,00	,086	-,088
Sig. (2-tailed)	.	,74	,73
N	0	16	16
Share causation total Correlation Coefficient	,086	1,00	-1,00
Sig. (2-tailed)	,74	.	,00
N	16	0	16
Share effectuation total Correlation Coefficient	-,088	-1,00	1,00
Sig. (2-tailed)	,73	,00	.
N	16	16	0

** . Correlation is significant at the 0.05 level (2-tailed)

Since there can always be third factors that could potentially influence the experiment the correlations need to be checked using a control variable. Therefore, as to be seen in table 3, the previous test from table 2 is repeated adding a control variable. In this case the control variable, sex, is used.

The Kendall's tau correlation between age and causation ($\tau = 0,086$) is not significant. There is no relationship between the age of a person and his / her choice of acting causal. The result is not statistically significant ($p > 0,05$). Regarding effectuation this result implicates that age has no influence on choosing to act effectual neither.

In conclusion, the presence of the control variable, sex, contributes to the strengthening of the relationship. Anyway, it has a rather weak influence. Thus, it cannot influence the relationship in such a way to eventually get a positive or negative relationship. Hence, even though including the control variable, the null hypothesis, $H1_0$, as well as the alternative hypotheses, $H1_a$, have to be rejected. In other words, even though it is differentiated between males and females there is still no evidence that age has any influence on the strength of the effectuation and causation approach among the student entrepreneurs.

5. Discussion & Conclusion

The intention of the study was to test whether age has an influence on the extent to which entrepreneurs tend to choose effectuation and causation when going through entrepreneurial process steps. To do so, a bivariate correlation analysis, excluding and including a control variable that served as potential influencer on the relationship, was made. As a result, no relationship between age causation is chosen was found. This implicates that there is no influence of age on choosing to act effectual neither. Finally, although a potential influence originated in the gender of a person was found it was not a significant but rather a weak contribution to the strengthening of the relationship. In short, the study did not show that there is any relationship between age and the extent to which entrepreneurs tend to choose effectuation and causation when dealing with entrepreneurial process steps.

In order to test the reliability of the experiment among student entrepreneurs from Germany randomly selected participants (n=2) were taken to calculate the effectuation and causation share of these two selected interviewees. The goal was to find out whether the calculated effectuation and causation shares of the two randomly chosen interviewees fit with the calculated effectuation and causation shares of the same two interviewees in the experiment among student entrepreneurs from Germany. The result was that the effectuation and causation shares of the two randomly selected interviewees almost fitted perfectly with the results of the same two interviewees in the experiment among student entrepreneurs from Germany. There was just a difference of some percentage points more or less. The test showed that the experiment among student entrepreneurs from Germany is reliable despite the possibility to select a greater number of random participants to strengthen the reliability of the experiment.

The study in this paper was limited due to the small sample of only twenty interviewees so it cannot be representative for an entire population. Anyway, this aspect can be discussed because of the coherent sample that contains of people from the same country with the same educational background. This fact can compensate for the size of the sample.

In comparison, a study by Sarasvathy (2001a) on effectuation and causation as presented before demonstrated that effectuation was preferred over causation. In the study a different sample than the one in this paper was used. The study was among 27 entrepreneurial experts from the United States of America while in this paper twenty student entrepreneurs from Germany were asked. Next to the number of participants the greatest difference between these two studies is the level of knowledge on entrepreneurial processes. Here the level of knowledge of the experts is clearly greater than the one of the student entrepreneurs. However, comparing different samples might contribute because different samples mean gaining insights into the study of effectuation and causation from different perspectives. Moreover, it can be seen whether the dimensions of effectuation and causation can be forwarded to people with different backgrounds (Perry et al., 2011). A more in-depth comparison between the study by Sarasvathy (2001a) and this study might be able to generate some valuable answers to this and to the question whether age can influence the extent to which people tend to choose effectuation and causation.

Doing research for this dimension as potential influencer can open up points of view in the context of entrepreneurship, and effectuation and causation that are novel to the academic field. Furthermore, in practice, by having insights into influences on entrepreneurial processes it may contribute in understanding entrepreneurial decision-making and thus, help to support entrepreneurs in managing entrepreneurial process steps. The academic field of entrepreneurship still offers a variety of opportunities for which research can be done. This paper has dealt with one aspect but many more aspects are there waiting to be explored. Therefore, this paper offers a starting point for further research in order to identify potential influencers in terms of effectuation and causation.

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7. Appendix

The ten problems.....11

The ten problems

The students were confronted with the following problems:

- 1) Identifying the market, 2) defining the market, 3) meeting payroll, 4) financing, 5) leadership / vision,
- 6) product re-development, 7) growing the company, 8) hiring professional management, 9) goodwill, and 10) exit.

