

Entrepreneur Scan identifies potential fast growers

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1. INTRODUCTION

Being an entrepreneur is cool! More and more people see self employment as a positive thing (Risseeuw, 2003). The number of businesses listed in the (Dutch) trade register has nearly doubled in recent years. Even in schools there is a growing focus on entrepreneurship. Under the guise of 'learning by doing', students learn to run their own business. Furthermore, the (Dutch) government has made a lot of money available for identifying and managing potential new and fast developing entrepreneurs. This has led to the existence of the successful 'IkStartSmart' project of the Dutch Chamber of Commerce where intensive coaching and training help to create more and better entrepreneurs (www.kvk.nl). But how do you know whether someone – business starter or student - has the necessary entrepreneurial competencies to be able and willing to become a successful entrepreneur? The Entrepreneur Scan (E-Scan) can help. This validated online test provides an insight into the competencies for entrepreneurship of any individual (Driessen, 2005). In this article we provide evidence that the E-Scan can distinguish potential fast developers from those who want to remain small, based on their entrepreneurial competencies.

Alongside entrepreneurial competencies, entrepreneurial intentions are central in this article. By this we mean the goal or aim that an entrepreneur has for their company. We make a distinction between business and personal entrepreneurial intentions (par 2.1). Our assumption is that an entrepreneur must pursue the best possible match between what they want and what they can do with their company. That is to say, their entrepreneurial competencies should match their entrepreneurial intentions (see Keuning, 2001).

Miner (1997) classifies entrepreneurs into four types, which he then attributes to various entrepreneurial competencies. He notes the importance of choosing the right career for the right entrepreneurial competencies, the so-called 'fit'. An entrepreneur must do what they are good at and thus choose an entrepreneurial intention that best fits their entrepreneurial competencies. After conducting a literature review, we concluded that - according to us - little statistical research has been done into the relationship between entrepreneurial intentions and entrepreneurial

competencies. This applies in particular to the relationship between personal entrepreneurial intentions and competencies. We believe that gaining more insight into this relationship is useful for entrepreneurs, government and business coaches or consultants. If, for example, the main objective of a business owner is 'to do work that I enjoy', then it makes little sense to persuade them with varying advice, grants or (government) programs to develop the competencies that are necessary for *growing* their business. He or she will probably not be really motivated to grow their business.

The aim of this research is to demonstrate the relationship between entrepreneurial intentions and entrepreneurial competencies. In section 2, the intentions of entrepreneurs and entrepreneurial competencies are defined and the relationship between them is elaborated on. Paragraph 3 shows the research design and section 4 shows the results. Finally section 5 contains the conclusions.

2. THEORY

In this section, the entrepreneurial intentions and entrepreneurial competencies are discussed. Then the relationship between the two is discussed and finally hypotheses are formulated.

2.1 The entrepreneurial intentions

In research literature, 'business growth' is often seen as the most important entrepreneurial intention. However, many entrepreneurs may have an intention other than business growth. An entrepreneur will regard themselves as successful, once they meet their own intentions (goals). Their intention could be to create profitable growth, but it may also be less entrepreneurial and be about pursuing continuity or just staying small (self-employed).

Recognition, autonomy, personal development and financial success are suggested by Birley and Westhead (1994) as being important entrepreneurial intentions amongst others. Gatewood, Shaver & Gartner (1995) suggest that 'independence' and 'financial success' are important entrepreneurial intentions and add to this 'the ability to successfully respond to a market demand'.

As well as a business intention, entrepreneurs also have a personal intention for their business.

Important personal intentions are named as 'financial independence' and 'autonomy and independence' (Burns, 2001, Stokes & Wilson, 2006).

Entrepreneurs who are purely focused on creativity, form a separate group. They would prefer to be remembered for their creative achievements and less for their business performance (Bolton & Thompson, 2000). Artists and others see a creative process as a reward in itself (Gill, 2006). Despite some creative minds being very profitable in business, business growth as such doesn't seem to be an important intention for these entrepreneurs. As these entrepreneurs do not pursue business growth, good business competencies are less of a requirement.

Creative entrepreneurs who are motivated by the 'creativity' intention belong to the so called 'lifestyle businesses'. Growth entrepreneurs who want to grow should possess strong entrepreneurial competencies. Lifestyle entrepreneurs start a company because it gives them a comfortable lifestyle, but they are often not focused on business growth (Burns and Dewhurst, 1996, Burns, 2001; Bridge, O'Neill & Cromie, 2003). For lifestyle entrepreneurs, strong entrepreneurial competencies are less important.

Besides creativity, 'deciding my own time' and 'doing work that I enjoy" (Bruins, 2004) are also mentioned. These two intentions are well suited to the pursuit of a certain lifestyle instead of pursuing growth or profit.

Within this study we looked at the following entrepreneurial intentions:

Business intentions

Maximizing profit

Strong growth in turnover and employees

Continuity

Remaining small

Personal intentions

Staying autonomous and independent

Becoming financially independent

Expressing my creative ideas

Determining my own time

Doing work that I enjoy

2.2 The entrepreneurial competencies

Entrepreneurial competencies are made up of the characteristics and qualities of entrepreneurs. Driessen (2005) divides entrepreneurial competencies into *six characteristics* and *three qualities*. All of these competencies are included in the Entrepreneur Scan. The *characteristics* consist of: Need for Achievement, Need for Autonomy, Need for Power, Social Orientation, Self Belief and Endurance. The *qualities* are: Market Awareness, Creativity and Flexibility. In his Ph.D. thesis, Driessen (2005) gives a detailed description of the various entrepreneurial competencies that are measured with the E-Scan (see also Driessen and Zwart, 2006).

Need for Achievement. Performance-based entrepreneurs demand the highest of themselves. They have a strong commitment to high performance. They want to perform to the best of their ability in everything they do, and always strive to do better than last time.

Need for Autonomy. An 'independent' person solves problems independently as much as possible. They are autonomous and independent and want to make decisions on their own.

Need For Power. A person in this category wants to be in charge of other people. Such 'dominant' individuals are good at imposing their will on others.

Social Orientation comes from the Need For Affiliation. Socially oriented people are good at developing and maintaining contacts, never overlooking the business perspective.

Self belief or personal efficacy comes from the 'Internal Locus Of Control'. People that score high for this characteristic are convinced that personal success depends on them. Success is not dependent on others or on circumstance. These people are convinced of their own ability. They are confident of their personal influence on events.

Endurance. A person with perseverance will never give up when faced with adversarial situations. They are committed to the goal they want to achieve and in the short term they do more than is necessary.

Market awareness is the ability to estimate the demands of customers. They know what is happening in a given market, both in terms of customer need as well as the position of competitors.

Creativity is the ability to recognize new opportunities. Creative entrepreneurs see opportunities where others do not; they often have an alternative perspective on a situation, seeing solutions rather than problems.

Flexibility is the capacity to adapt. When new developments in the area are identified, plans are easily changed.

Of course other entrepreneurial competencies do exist. (See e.g. Van Uffelen, 2005). But in the research by Driessen (2005) these are the characteristics and competencies found to be key competencies for an entrepreneurial attitude and behavior.

2.3 Entrepreneurial competencies in relation to business intentions

Many literature sources divide entrepreneurs into two types: the craftsman and the

opportunist. There are clear differences between the competencies of these two types of entrepreneur. Moreover, these two different types of entrepreneur have different business intentions. Chell (2001) suggests that the craftsman type is an entrepreneur who wants to do everything on their own and who avoids building relationships as much as possible. The opportunist often has a professional background and craves development. The craftsman is mainly engaged in technical work (Woo, Cooper & Dunkel Berg, 1991) and is product-oriented, compared to the more market-oriented opportunist (Risseuw & Thurik, 2003).

Smith & Miner (1983) also point out the differences between these two types of entrepreneur and then provide the evidence for it. In contrast to the opportunist, the craftsman is often poorly educated and not very concerned with their surroundings. Their company can be characterized as rigid. They often have no long term vision. The more an organization resembles that of the opportunist, the more adaptive the organization and the more it is focused on company growth. Carland, Hoy, Boulton & Carland (1984) see a clear difference between an opportunist and a craftsman. An opportunist will (more than a craftsman) strive for profit and business growth.

So, an entrepreneur is to be characterized along the continuum from craftsman to opportunist. The more an entrepreneur tends to an opportunist, the more they will focus on business growth. Because high scores in entrepreneurial competencies are necessary in order for achieve business growth to occur, entrepreneurs with the business intentions 'strong growth in turnover and employees' must score high on the E-Scan (Driessen, 2006). This also seems to hold true for the entrepreneurial intention 'maximizing profit'. Entrepreneurs who opt for 'staying small' will be more likely to be a craftsman and will have less of a need to have high scores on business competencies than the opportunist.

As well as the craftsman and opportunist - some call for a third type of entrepreneur: the 'administrator' (or 'manager'). The administrator is focused on controlled business growth (Burns and Dewhurst, 1996; Hornaday, 1990). Hornaday (1990) stresses the importance of continuity of the company. The administrator wants to achieve growth, but only steady growth. The company's growth will be lower than that of the opportunist, however, higher than that of the craftsman. It seems plausible that these entrepreneurs need to score lower on entrepreneurial competencies than the opportunist, but better than the craftsman. For this we expect entrepreneurs with the business intention 'continuity' to score between 'strong growth in turnover and

employees / maximizing profit' and 'staying small'.

The following hypotheses have been formulated:

Hypothesis 1: The business intention 'strong growth in turnover and employees' will score higher on all entrepreneurial competencies than:

- (a) 'continuity'
- (b) 'staying small'

Hypothesis 2: The business intention 'maximizing profit' will score higher on all entrepreneurial competencies than:

- (a) 'continuity'
- (b) 'staying small'

Hypothesis 3: The business intention 'continuity' will score higher on all entrepreneurial competencies than 'staying small'

2.4 Entrepreneurial competencies in relation to personal intentions

The entrepreneurial intentions 'expressing my creative ideas' as well as 'determining my own time' and 'doing work that I enjoy' can all be described as lifestyle intentions. It seems therefore likely that entrepreneurs who pursue these three entrepreneurial intentions don't need to possess as many good business competencies. In our opinion, these three entrepreneurial intentions should score lower than the intentions 'staying autonomous and independent' and 'becoming financially independent'.

Hypothesis 4: The personal intention 'staying autonomous and independent' will result in a higher score on all entrepreneurial competencies than these below:

- (a) 'Expressing my creative ideas'
- (b) 'Determining my own time'
- (c) 'Doing work that I enjoy'

Hypothesis 5: The personal intention 'becoming financially independent' will score higher on all entrepreneurial competencies than:

- (a) *'Expressing my creative ideas'*
- (b) *'Determining my own time'*
- (c) *'Doing work that I enjoy'*

3. RESEARCH DESIGN

In this section the research process and data analysis are discussed

3.1 Research process

The database used in the present study was provided by Entrepreneur Consultancy BV. Visitors to their website (<http://www.ondernemerstest.nl>) completed the E-Scan. In the E-Scan they were asked to choose from the personal and business intentions mentioned above. It was made clear to each candidate completing the E-Scan that their personal details would be kept in the strictest confidence.

There were 31,710 respondents in all. These consisted of 20,769 men and 10,941 (34.5%) women, which is close to the national figure of 33%.

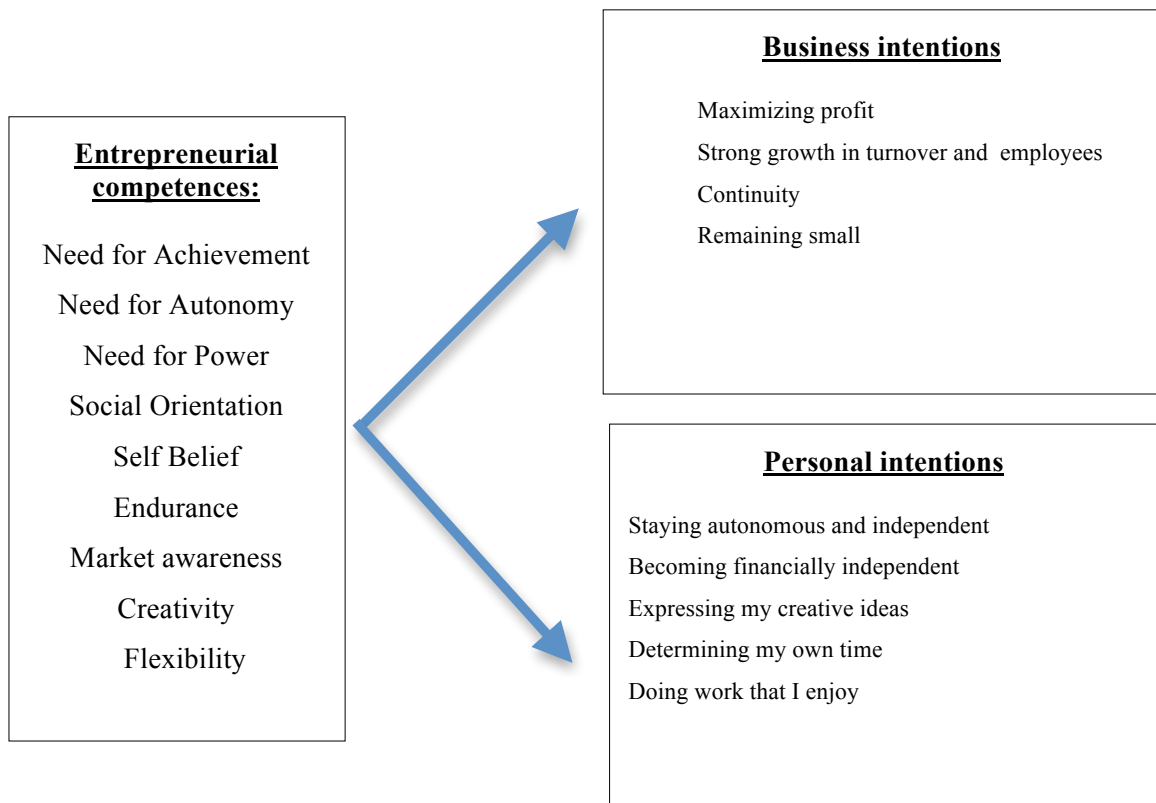
3.2 Variables

The entrepreneurial intentions in the present study are considered as the dependent variables. The entrepreneurial competencies are seen as the independent variables.

The research model relating to this is shown in Figure 1 and the research question is:

What is the relationship between the entrepreneurial competencies identified by the E-Scan and the entrepreneurial intentions of entrepreneurs?

Figure 1. Model of the research into entrepreneurial intentions and entrepreneurial competencies



The entrepreneurial competencies are measured through assessing the answers given by the respondents to all aspects of the entrepreneurial competencies above. The items are scored on a seven point Likert scale. Thus the scores for the entrepreneurial competencies of the respondents are measured by finding the average of all the aspects relating to each competence. Because the E-Scan research has been validated (Driessen, 2005), we can assume that the scores are a reliable and valid representation of the respondents' entrepreneurial competencies.

The entrepreneurial intentions are measured using two questions. The entrepreneurs were asked to choose the most important business intention out of four. Next they were asked to choose the most important personal intention from five individual entrepreneurial intentions.

3.3 Data-analysis

The relationship between entrepreneurial intentions and entrepreneurial competencies are measured using the 'one-way analysis of variance'. The business and personal entrepreneurial intentions are nominal variables. The entrepreneurial competencies are interval variables. For each entrepreneurial competence, a check is made to see if the 'mean averages' of the entrepreneurial intentions are significantly different from

each other.

To determine which groups significantly differ from each other, a multiple comparison test is performed. For this purpose, the Scheffe multiple comparison test is used. Compared to other multiple comparison tests, this test requires the biggest difference between two means before it is regarded as significant (Huizingh, 2006). This multiple comparison test makes it possible to significantly differentiate large groups from each other in a realistic manner.

4. RESULTS

Table 1 shows that under 'business intentions' the majority of respondents opted for 'continuity' for their business (63.1% of respondents). Financial success: made up of 'maximizing profit' and 'strong growth in turnover and employees' was relevant for 30.7% of the respondents. Table 2 shows that 'staying autonomous and independent' was one of the main intention chosen from the five possible personal intentions (34.3% of respondents). The highest scoring personal intention is 'doing work that I enjoy '(36.3% of the respondents). 'Becoming financially independent' was chosen by only 17.7% of the respondents.

Table 1. Frequency table - business intentions (N = 31,710)

	Percentage
Maximizing profit	14.5
Strong growth in turnover and employees	16.2
Continuity	63.1
Remaining small	6.2
Total	100.0

Table 2. Frequency table personal intentions (N = 31,710)

	Percentage
Staying autonomous and independent	34.3
Becoming financially independent	17.7
Expressing my creative ideas	9.3
Determining my own time	2.4
Doing work that I enjoy	36.3
Total	100.0

The results of the Scheffe test for one of the entrepreneurial competencies (Need for Achievement) are indicated in Tables 3 and 4. The same tests are conducted for all competencies (see Annex 1). Tables 3 and 4 show the example of when two

entrepreneurial intentions significantly differ from each other (using the Scheffe test). Entrepreneurial intentions that are significantly different, are in a different 'significance class' (sk). Entrepreneurial intentions that are not significantly different, are placed in the same significance class (sk).

For example, Table 3 shows that the entrepreneurial intention 'remaining small' scores 7.58 for the entrepreneurial competence Need for Achievement. This means that respondents who have chosen the option 'remaining small', collectively scored an average of 7.58 for Need for Achievement. This differs significantly from the score of 8.05 for 'continuity' or 8.21 for 'maximizing profit' and 8.29 for 'strong growth in turnover and employees'. The personal intentions 'becoming financially independent' (8.21) and 'staying autonomous and independent' (8.25) do not significantly differ from each other for Need for Achievement (Table 4).

Table 3. Business intentions and averages for Need for Achievement

	<u>sk1</u>	<u>sk2</u>	<u>sk3</u>	<u>sk4</u>
Remaining small	7.58			
Continuity		8.05		
Maximizing profit			8.21	
Strong growth in turnover and employees				<u>8.29</u>
<u>p</u>	<hr/>			
F=264.54				
p=.00				

Table 4. Personal intentions and averages for Need for Achievement

	<u>sk1</u>	<u>sk2</u>	<u>sk3</u>	<u>sk4</u>
Determining my own time	7.46			
Doing work that I enjoy		7.90		
Expressing my creative ideas			8.08	
Becoming financially independent				8.21
Staying autonomous and independent				<u>8.25</u>
<u>p</u>	<hr/>			
F=287.66				
p=.00				

Based on Annex 1 a total of 6 hypotheses are fully confirmed (1a, 1b, 2b, 4b, 4c, and 5b). This means that for these 6 hypotheses all 9 entrepreneurial competencies show significant differences between the proposed intentions:

The business intention 'strong growth in turnover and employees' has a significantly higher score for all 9 entrepreneurial competencies than 'continuity' (Hypothesis 1a) and 'remaining small' (Hypothesis 1b).

The business intention 'maximizing profit' has a significantly higher score for all 9 entrepreneurial competencies than 'remaining small' (Hypothesis 2b)

The personal intention 'staying autonomous and independent' has a higher score for all the 9 entrepreneurial competencies than 'determining my own time' (Hypothesis 4b) and 'doing work that I enjoy' (Hypothesis 4c).

The personal intention 'becoming financially independent' has a higher score for all 9 entrepreneurial competencies than 'determining my own time' (Hypothesis 5b).

As for the other 5 hypotheses (2a, 3, 4a, 5a and 5c) it can be concluded in general that they are largely supported.

Hypothesis 2a is supported for 4 of the 9 entrepreneurial competencies. For four of the entrepreneurial competencies 'maximum profit' scores significantly higher than 'continuity' (Need for Achievement, Autonomy, Power and Self Belief). For four of the entrepreneurial competencies, there is no significant difference between 'maximizing profit' and 'continuity' (Social Orientation, Market awareness, Creativity and Flexibility). Only once did 'maximizing profits' score significantly lower than 'continuity' (Endurance).

Hypothesis 3 is supported for 8 of the 9 entrepreneurial competencies. For 8 of the entrepreneurial competencies the entrepreneurial intention 'continuity' scores significantly higher than 'remaining small' (Need for Achievement, Need for Power, Social Orientation, Self Belief, Endurance, Market Awareness, Creativity and Flexibility). For Need for Autonomy, there is no significant difference between 'continuity' and 'remaining small'.

Hypothesis 4a is supported for 7 of the 9 entrepreneurial competencies. For 7 entrepreneurial competencies 'staying autonomous and independent' scores significantly higher than 'expressing my creative ideas' (Need for Achievement, Need for Autonomy, Need for Power, Social Orientation, Self Belief, Endurance and Market Awareness). For one entrepreneurial competence 'staying autonomous and independent' scores significantly below 'expressing my creative ideas' (Creativity). For one entrepreneurial competence, there is no significant difference between 'staying autonomous and independent' and 'expressing my creative ideas' (Flexibility).

Hypothesis 5a is supported for 6 of the 9 entrepreneurial competencies. For 6 entrepreneurial competencies 'becoming financially independent' scores significantly

higher than 'expressing my creative ideas' (Need for Achievement, Need for Autonomy, Need for Power, Social Orientation, Self Belief and Endurance). For one entrepreneurial competence, there is no significant difference between 'becoming financially independent' and 'expressing my creative ideas' (Market Awareness). For two entrepreneurial competencies 'becoming financially independent' scores significantly lower than 'expressing my creative ideas' (Creativity and Flexibility).

Hypothesis 5c is supported for 8 of the 9 entrepreneurial competencies. For 8 entrepreneurial competencies 'becoming financially independent' scores significantly higher than 'doing work that I enjoy' (Need for Achievement, Need for Autonomy, Need for Power, Social Orientation, Self Belief, Endurance, Creativity and Market Awareness). For one entrepreneurial competence, there is no significant difference between 'becoming financially independent' and 'doing work that I enjoy' (Flexibility).

5. CONCLUSION

The purpose of this article is to demonstrate the relationship between entrepreneurial intentions and entrepreneurial competencies. After the concepts of entrepreneurial intentions and entrepreneurial competencies are discussed, the relationship between the two is examined with the help of one-way analysis of variance. In the literature it is found that the entrepreneurial type of the 'opportunist' fits well with the business intentions 'strong growth in turnover and employees' and 'maximizing profit'. The entrepreneurial type of the 'craftsman' has a better fit with intentions like 'continuity' and 'remaining small'. The business intentions 'expressing my creative ideas', 'determining my own time' and 'doing work that I enjoy' are better suited to the lifestyle-entrepreneur. We also conclude that on the basis of Miner et al. (1997) growth-entrepreneurs score higher than lifestyle-entrepreneurs regarding the entrepreneurial competencies. Or in other words: we assume a 'fit' between entrepreneurial intentions and entrepreneurial competencies. According to the Scheffe test the following can be concluded:

Entrepreneurs who opt for the business intention 'strong growth in turnover and employees' score higher on all entrepreneurial competencies than entrepreneurs who opt for 'continuity' and 'remaining small'. Entrepreneurs who opt for the personal intentions of 'staying autonomous and independent' score higher on all the entrepreneurial competencies than entrepreneurs who choose 'determining my own

time' and 'doing work that I enjoy'. The assumptions were not fully supported for all 9 competencies but gave support to the overall picture: entrepreneurs clearly choose an intention that fits their entrepreneurial competencies.

The present study thus confirms the existence of a 'fit' between an entrepreneurial intention and entrepreneurial competencies. If the intention of an entrepreneur does not match their entrepreneurial competencies, a financial advisor or business coach may point out that this is an unrealistic intention. For an entrepreneur who does not have the competencies to grow, it would be better not to pursue high growth. Still an entrepreneur with smaller entrepreneurial competencies (as long as he has a matching entrepreneurial intention) can be successful.

The government can learn from the results of this study. By encouraging entrepreneurship, the government often focuses on growth (or on fast developing business start-ups). With the E-Scan, the government can help entrepreneurs to bring their intentions in line with their competencies. Now they can design projects that focus on the entrepreneur as the starting point. This can work both ways. Either by bringing the competencies of the entrepreneur in line with their intentions and ambitions or the other way around: bringing their intentions in line with their competencies. It is possible to develop the competencies of entrepreneurs and encourage them to become more entrepreneurial, if they choose to do so. The IkStartSmart project in the province of Gelderland in the Netherlands is an example of where the E-Scan has been used successfully as a starting point (and an end point for research reasons). Tillaart (2008) describes how the E-Scan has successfully been put to use in this initiative for the development of entrepreneurship, operationally and scientifically. It would be wise for the government to provide specific financial packages according to the type of entrepreneur. For the opportunist (the growth-oriented entrepreneurs) it would help to strengthen the competencies needed for growth. The lifestyle entrepreneur, in contrast, would be better served by recognition. For this, group growth initiatives and subsidies will probably miss their aim. It is better to appreciate their creative ideas and, if possible, to connect them to the more growth oriented entrepreneurs. Now with E-Scan it is possible to discover the growth potential and willingness of the entrepreneurs themselves, and what the possibilities are for developing the entrepreneurial competencies of the entrepreneur towards fast growth.

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APPENDIX

A one-way analysis of the variance is used for testing the relationship between the business intentions and entrepreneurial competencies.

Need for Achievement (F=264.54, p=.00), Need for Autonomy (F=40.37, p=.00), Need for Power (F=398.55, p=.00), Social orientation (F=86.24, p=.00), Self belief (F=139.10, p=.00), Endurance (F=84.01, p=.00), Market awareness (F=158.65, p=.00), Creativity (F=69.92, p=.00) and Flexibility (F=51.21, p=.00) all show a significant difference in averages for at least two business intentions. Need for Achievement (F=287.66, p=.00), Need for Autonomy (F=189.58, p=.00), Need for Power (F=152.41, p=.00), Social orientation (F=164.13, p=.00), Self belief (F=214.67, p=.00), Endurance (F=363.19, p=.00), Market awareness (F=260.36, p=.00), Creativity (F=261.12, p=.00) en Flexibility (F=142.77, p=.00) all show significant differences in the average figures for at least two personal intentions.