The Language of Successful Entrepreneurs: An Empirical Starting Point for the Entrepreneurial Mindset

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Abstract

The concept of entrepreneurial mindset is growing in popularity within the field of entrepreneurship. Entrepreneurial mindset orients human's behaviour towards entrepreneurial activities and outcomes. The concept lacks empirical support due to methodological difficulties in discovering how entrepreneurs think. This article aims to address this by examining the language successful entrepreneurs use in an attempt to find evidence of an expert entrepreneurial mindset. Language represents the way people think and what they think about. This paper examines interviews of 51 high-tech entrepreneurs from Silicon Valley who have successfully started companies and attracted between $20 million and $1 billion in start-up funding and have a minimum of 30 employees. The study analyses the linguistic content of what the successful entrepreneurs talk about during interviews by comparing it to a control group of spoken text from average entrepreneurs. This reveals a number of differences in the way language is used between the two groups. We find evidence supporting the presence of several orientations – action, future, customer, collective, and growth – associated with a mindset of successful entrepreneurs. We also contribute to the existing call of using new methodological approaches to study the entrepreneurship paradigm. We outline new avenues for further research into the entrepreneurial mindset.

1. Introduction

The search for who an entrepreneur is, and how they are different from the general population, has been ongoing for decades. The original focus has largely been on personality traits, and after 30 years it has produced only mixed results (Krueger et al., 2000, Brandstätter, 2011). Growing in popularity though has been the concept of an entrepreneurial mindset that is fluid and can be learnt unlike a personality trait (Obschonka et al., 2011, Haynie et al., 2010). Yet, after reviewing the literature there is little empirical evidence of what is entrepreneurial mindset.

In order to gather this empirical evidence, we use a word analysis tool on a collection of interview transcripts. The data for this study is drawn from a sample of 51 entrepreneurs in Silicon Valley who have achieved success as measured by the venture capital they have managed to receive and the number of employees they have. The analysis reveals a number of words that are significantly different in terms of under usage and over used. These significant results are then reviewed in context and coded for possible meaning. The results are an empirical based suggestion of how a successful entrepreneurial mindset differs from that of less successful entrepreneurs.

This study contributes in three significant ways. The first is an introduction of a new methodology by which an entrepreneurial mindset can be assessed and analysed. This methodology has proven useful in other research such as in the early detection of psychosis (Bedi et al., 2015). Second, it contributes to the discussion around cognitive element of entrepreneurship, without falling into the existing theoretical quick sand of personality traits. Third, most other literature using text analysis in the field of entrepreneurship has used a theoretical lense of persuasion (Mitra and Gilbert, 2014) or examines social entrepreneurship (Parkinson and Howorth, 2008). Our point of departure is that we adopt a different theoretical standpoint and examine a different
context, while utilising a similar methodology. Lastly, the practical importance for entrepreneurs is that the paper lays a method by which we can begin to focus on the language that other successful entrepreneurs are using. Based on a social constructivist point of view, it suggests that using similar language, and discussing topics in a similar manner may impact our mindset (Ahl, 2003). Such a claim is based on the understanding that our thoughts affect our language, but that this is a two-way relationship, and that language can equally impact our thought process and actions (Ahl, 2003).

2. Background

The quest for the Holy Grail in entrepreneurship research has seen an endless search for how entrepreneurs are different from the general public. Successful small business owners and entrepreneurs come in every shape, size, color, and from all backgrounds (Baron, 1998). Examining differences between entrepreneurs and the general population is a flawed starting point in our opinion. This is because the difference between entrepreneurs is as great as the difference between entrepreneurs and non-entrepreneurs (Gartner, 1985). In addition, we question the fascination in the field of entrepreneurship with the average entrepreneur. Instead we suggest the field should be focused on top entrepreneurs, or those who have been highly successful (Baron and Henry, 2010). One recurring insight is that the successful entrepreneurs can be characterized by an expert mindset (Krueger, 2007), yet there is no clear understanding of what that mindset is (Baron and Henry, 2010). This study sets out to explore in what ways that expert entrepreneurial mindset might be identified through language.

Researchers have postulated that cognition has the potential to make a significant contribution to the study of entrepreneurship (Baron, 1998, Busenitz and Barney, 1997, Mitchell et al., 2007, Kickul et al., 2009). The cognition world is growing in popularity because it recognizes the importance of the mind and the dynamic approach to learning how to think entrepreneurially (Neck and Greene, 2011). There has been a growing popularity of the term entrepreneurial mindset as a cover-all term for entrepreneurial cognition (Baron, 1998), meta cognition (Haynie et al., 2010) and character adaptions (Obschonka et al., 2011). We discuss these concepts in turn, although we do not attempt to describe which of three terms, if any, is the most accurate description of an entrepreneurial mindset. A high level definition is: an entrepreneurial mindset as a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal (Ireland et al., 2003). In other words, even under the cloak of uncertainty, the entrepreneurially minded can identify and exploit new opportunities because they have cognitive abilities that allow them to impart meaning to ambiguous and fragmented situations (Alvarez and Barney, 2002).

The challenge has been to find out how entrepreneurs think and make sense of their world—how they acquire, process, and transform information into useful knowledge. Entrepreneurial cognitions are thus defined as the “knowledge structures that people use to make assessments, judgments or decisions involving opportunity evaluation, venture creation, and growth” (Mitchell et al., 2002, p. 97). Empirical research examining the connection between entrepreneurial cognitions and venture creation has demonstrated that entrepreneurs across many different national cultures use similar cognitive scripts, although what these scripts are is not defined (Mitchell et al., 2002, Mitchell et al., 2000).

McAdams and Pals (2006) argue that an individual’s personality is composed of three intertwined levels: dispositional traits, characteristic adaptations, and integrative life narratives. Dispositional traits “reflect the enduring psychological core of the individual” (McCrae and Costa Jr, 1999, p. 144) and as such are relatively enduring and unchanging. Characteristics adaptions are adaptations that are “activated in response to and ultimately shaped by the everyday demands of social life” (McAdams and Pals, 2006, p. 209), and are thus more prone to change and fluctuate throughout one’s life. Obschonka et al. (2011) suggest that entrepreneurial success is linked to characteristic adaptions, even when controlling for dispositional traits. We are interested in characteristics adaptions, or that side of cognition that can be learned and improved. It is these characteristic adaptions that we associate with an entrepreneurial mindset, not the relatively fixed dispositional traits typically associated with personality.

The emerging view of entrepreneurial cognition suggests that an understanding of the mental processes of entrepreneurs will enable researchers to build a well-grounded foundation toward systematically explaining the individual’s role within the process of entrepreneurship (Mitchell et al., 2002). Yet, there appears to be scant empirical evidence of what exactly an entrepreneurial mindset might be, or what the expert
entrepreneurial cognition is. This might be due to the methodological challenges of reliably measuring what the thought processes are of a successful entrepreneur. Individuals are seldom able to give full explanations of their actions or intentions; all they can offer are accounts, or stories, about what they did and why, yet these are notoriously unreliable (Cope, 2005). Despite this challenge, we still think there should be a greater emphasis on searching for evidence to support the definition of an entrepreneurial mindset. We suggest one way to examine empirically the entrepreneurial mindset is through examining the language that entrepreneurs use when discussing their business.

Language reflects what people think about, and how they think about it. Language plays a role in forming individuals reality construction (Ahl, 2003). “Language circumscribes (and makes possible) what one can think and feel and imagine doing” (Ahl, 2003, p.63). Together, in social interaction, through the processes of externalization, objectification and internalization, humans construct their reality (Ahl, 2003). Conversation is the most important vehicle of reality-maintenance, according to Berger and Luckmann (1991). That language reflects how we think and experience our reality is not a new idea. We, therefore, start our examination of the expert entrepreneurial mindset through an analysis of the language used by successful entrepreneurs.

3. Method

We use a language analysis tool, Wmatrix, that was developed at the University of Lancaster. The tool allows comparisons to be made between two bodies of text. We use purposeful sampling to choose the subjects for this study (Patton, 1990). We selected information rich cases for which we could learn the most from, as opposed to a random sample. In doing so, the researcher examines specific interests in the phenomenon, selecting cases of some typicality, but leaning towards those cases for which we can learn the most, (Stake, 1995).

We settled on interviews collected and posted to a website called www.cleverism.com. The site held two separate libraries of interviews, one collection from 2014 and another from 2015. Together they amounted to 76 interviews, and provide both a video of the interview and a transcript. Upon closer inspection, it was revealed that several of these were in fact venture capitalists, and were removed from the sample of interviews. Furthermore, each of the participant companies were reviewed from data made available in interviews. We selected only firms that had received between $20 million and $1 billion in funding. We wanted to ensure that we selected only those firms that we could call “successful” when using investment capital as the criteria. We used a further filter, selecting only companies having a minimum of 30 employees as a secondary benchmark for success and checked that all of the companies were based in Silicon Valley and based on a what might be described as high-tech ideas. This left us with a total of 51 interviews.

The transcripts of the interviews were checked for consistency against the audio files for the first five interviews, and no differences were detected. The transcripts were then scrubbed to remove the interviewers’ questions and comments. In addition, the introductions such as “My name is... and I am the CEO of...” were removed, along with the closing comments that typically followed the format of “thank you for taking the time today...”. In doing so, we ensured that the text reflected natural patterns of speech. This resulted in a body of text containing a total of 187,842 words. As this contained 51 interviews we are confident that no one individual has skewed the results. In examining the interviews, it was obvious that participants were allowed to answer freely, and often answered questions in monologues that lasted several minutes. As such, we think the language analysed is not tightly influenced by the interviewers questions.

Our control group came in the form of a corpus of entrepreneurs/small business owners developed at Lancaster University by Mudraya et al. (2005). The corpus consisted of 98 interviews and contained a total of 840,000 words. This contained 44 interviews with restaurant businesses (331,000 words), 21 with manufacturing for outdoors (210,000 words), 10 on entrepreneurial learning (188,000 words), 10 on entrepreneurial failure (60,000 words), 11 on small businesses in general (28,000 words) and 2 on family businesses (23,000 words). This corpus represents a broad coverage on dialogue with entrepreneurs, and serves as control group for the average entrepreneur. While not specifically stated, we presume the interviews were with people from the UK.
4. Results

We were surprised at the significance of the results that were obtained and decided to filter the results based on only including those that were highly significant at the 99.99% level, and for which the word had been used a minimum of 15 times. Significance here refers to the log-likelihood, which measures the relative frequency of a word, compares it to the relative frequency of the same word in the control group, and measures to see if the difference is significant. The word count limit of 15 was applied to the results to avoid obscure words that were not in common use. There were 373 words that fulfilled the criteria of being significant and commonly used (N>15). The results discussed only relate to those words that were found to be significant at 99.99% (unless specifically stated). For the sake of brevity, we do not mention that each result is significant further down in the text.

We opted to try to extract meaning through coding the individual words to themes or potential topics. We approached the data with an open mind (without preconceived propositions) to allow it to speak to us. This involved considering how the word was likely used and reviewing its usage within context (an example of which is shown in Table 2). This involved a process of subjectively attributing meaning to the way the word had been used, and speculating what this might represent. We fully acknowledge that others assessing the data might have interpreted the data in different ways. The exercise of coding the results lead to five themes that occurred repeatedly.

5. Discussion

5.1 Action orientated

The first major theme which seemed apparent to us was the concept of taking actions or steps towards achieving desired outcomes. The entrepreneurs interviewed seemed to have strong bias towards taking action, even under circumstances of limited information or where the situation and potential outcome was ambiguous. Entrepreneurs are generally considered to be “do-ers”, people who get on and take action towards their goals instead of those who might be orientated towards detailed planning and collecting more information before acting (Fisher, 2012).

There were a total of 17 words for which we coded them as demonstrating action. The words alone have little value, but rather these words were traced back to the context in which they were used in order to understand what the word meant in its general usage by entrepreneurs. The words are displayed in Table 1.

Table 1: Words coded as action orientated

<table>
<thead>
<tr>
<th>Word</th>
<th>Number of times used</th>
<th>% of total usage</th>
<th>Number of times used (control group)</th>
<th>% of total usage</th>
<th>+ indicates used more often (compared to control group)</th>
<th>log-likelihood value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>build</td>
<td>230</td>
<td>0.13</td>
<td>65</td>
<td>0.01</td>
<td>+</td>
<td>488.76</td>
</tr>
<tr>
<td>use</td>
<td>283</td>
<td>0.16</td>
<td>336</td>
<td>0.04</td>
<td>+</td>
<td>236.17</td>
</tr>
<tr>
<td>building</td>
<td>149</td>
<td>0.08</td>
<td>162</td>
<td>0.02</td>
<td>+</td>
<td>137.01</td>
</tr>
<tr>
<td>built</td>
<td>88</td>
<td>0.05</td>
<td>51</td>
<td>0.01</td>
<td>+</td>
<td>134.09</td>
</tr>
<tr>
<td>will</td>
<td>415</td>
<td>0.24</td>
<td>994</td>
<td>0.13</td>
<td>+</td>
<td>96.51</td>
</tr>
<tr>
<td>using</td>
<td>124</td>
<td>0.07</td>
<td>161</td>
<td>0.02</td>
<td>+</td>
<td>92.89</td>
</tr>
<tr>
<td>launched</td>
<td>53</td>
<td>0.03</td>
<td>27</td>
<td>0</td>
<td>+</td>
<td>86.98</td>
</tr>
<tr>
<td>creating</td>
<td>42</td>
<td>0.02</td>
<td>23</td>
<td>0</td>
<td>+</td>
<td>66.18</td>
</tr>
<tr>
<td>created</td>
<td>39</td>
<td>0.02</td>
<td>22</td>
<td>0</td>
<td>+</td>
<td>60.4</td>
</tr>
<tr>
<td>able</td>
<td>228</td>
<td>0.13</td>
<td>285</td>
<td>0.04</td>
<td>+</td>
<td>179.03</td>
</tr>
<tr>
<td>solve</td>
<td>73</td>
<td>0.04</td>
<td>17</td>
<td>0</td>
<td>+</td>
<td>165.15</td>
</tr>
<tr>
<td>create</td>
<td>107</td>
<td>0.06</td>
<td>62</td>
<td>0.01</td>
<td>+</td>
<td>163.06</td>
</tr>
<tr>
<td>going_to</td>
<td>431</td>
<td>0.24</td>
<td>1232</td>
<td>0.16</td>
<td>+</td>
<td>53.47</td>
</tr>
<tr>
<td>start</td>
<td>187</td>
<td>0.11</td>
<td>433</td>
<td>0.06</td>
<td>+</td>
<td>47.89</td>
</tr>
<tr>
<td>first</td>
<td>340</td>
<td>0.19</td>
<td>944</td>
<td>0.12</td>
<td>+</td>
<td>47.62</td>
</tr>
<tr>
<td>make_1t</td>
<td>71</td>
<td>0.04</td>
<td>113</td>
<td>0.01</td>
<td>+</td>
<td>39.82</td>
</tr>
</tbody>
</table>
In assessing the context in which the words were used, Table 2 provides an example of how the context is shown by the Wmatrix tool for the word “build”. The Wmatrix tool allows you to see all 230 examples of where the word “build” has been used. We can see from the examples that the word “build” is in connection to entrepreneurial actions that have been or will be taken. In conjunction with the 17 words listed in Table 1, this leads us to believe that entrepreneurs are better at taking actions to achieve their goals.

Table 2: Example of words examined in their context

| ...ing on it. Why? Because I want to build WhatsApp for this thing, I want to... |
| ...e part of the culture, you have to build as well as to get these people to un... |
| ...ill start up and it was very fun to build something out of nothing and we sort... |
| ...al thought was we would go back and build a community of software engineers bu... |
| ...because I have the idea. But let's build a company together. So that's the ki... |
| ...same time. That's why we decided to build a new solution from scratch, to add... |

(note: the analysis tools limits the context to 80 characters including spaces)

There is ample evidence of this in the lore of Silicon Valley too. Bill Gates was reported to have said the company that iterates the quickest will succeed the soonest. There is also the popular saying in Silicon Valley that you should fail forward or fail quickly to succeed sooner. These popular sayings are based on the idea that you have to take action in building a company to see what works and what does not. There seems to be evidence based on the language used that successful entrepreneurs have taken this to heart, and that their language reflects this propensity to act.

5.2 Future orientated

The next major theme is the tense of the language used. Successful entrepreneurs seemed to be more concerned with the future than they were with the past when compared to the control group. This was evident in two manifestations in the data. The first was the over use of future tense words, and the second was the under use of words relating to past tense. There were 15 examples of words that demonstrated this theme. An example of this is the use of the words “have to” was overused, while the words “had to” were underused. Another example is “can” (overused) versus “could” (underused).

We suggest that successful entrepreneurs are more focussed on the future, as the opportunity still exists for them to affect its outcome. Meanwhile, a focus on the past might be considered futile, as the events have already occurred and cannot be altered. This suggest that a narrow focus on what you can affect, such as the future, is correlated to success.

5.3 Collective

Another theme that stood out was that successful entrepreneurs appear to have a collective focus in the way they talk. They seem less focussed on themselves, and are more likely to use words demonstrating a collective perspective. There were a total of 15 words that support the assertion that entrepreneurs have a more collective perspective than the control group. Words that were overused included: our, we, company, us, partners, and team. Meanwhile, words that were underused were: I, me, they, him, his. At an initial glance the underused words—like they, him and his—might not appear to support this collective theme we propose. However, careful consider demonstrates that in order to talk about a person or group of people as being separate from you, then you must use these words. Interestingly, the word “her” did not make it to our list of results simply because it was not used enough (although the difference from the control group was highly significant, we set a minimum usage of 15 occurrences). The word “her” was used only 8 times by Silicon Valley
entrepreneurs, while if it had been used as often as the control group then we would have expected the word to occur approximately 56 times.

We propose the reason that successful entrepreneurs have a collective approach in their language is because they have been effective at leveraging others in order to create their start-up. This has been supported by other findings such as Parkinson and Howorth (2008). Successful entrepreneurs realise that the company is not about them personally, but rather about a collective effort to generate results. In addition, this collective approach assists in motivating staff to feel like they are involved, as part of a team, instead of a separation between them and us.

5.4 Customer orientation

One theme that appeared early in analysing the results was the concept of customer orientation. The entrepreneurs seemed to have a very clear focus on their customers and understanding their customers’ needs and requirements. This might seem obvious, but remembering the control group is also entrepreneurs, we did not expect to see a significant difference in the customer orientation of the language used. A total of 9 words related to customer orientation, resulting in 2585 instances whereby customers were the focus of the conversation. Not every instance was about customers; however, many of these 2585 instances were connected to the theme. One particular world stood out as being of interest, and that was the word “success.” This was often used in connection with the word “customer.” It likely implies that the entrepreneurs are concerned with their customers’ success, not just their own personal success. This might be described as a win-win type mentality, whereby entrepreneurs are focused on doing well for themselves, by ensuring their customers are doing well.

5.5 Growth/learning oriented

One of the more tentative themes that emerged was the concept of entrepreneurial growth. This might be described as the entrepreneurs being focussed on learning, and growing as people and being the best version of themselves. There were only 4 words which were coded to this theme, however, we felt it was worthy of further investigation. We propose that entrepreneurs are lifelong learners, who are curious and who see experiences as an opportunity to learn and improve themselves. The control group for example is twice as likely to label an experience as failure as the successful entrepreneurs. This might be the case because the successful entrepreneurs might have had fewer failures, or it might be that they see them as experiences, for which they use the word “experience” three times more often than the control group. This suggests also that successful entrepreneurs are less inclined to label good or bad, but rather as simply an experience. Again this is supported by the lack of the use of the word “good”, and the under usage of the word “bad” (significant at the 99% level, but not at the 99.99% level). This concept is consistent with Dweck (2006) description of a growth mindset that is supportive of success.

6. Limitations

We would not suggest that simply adjusting the usage of single words would be sufficient to bring about successful entrepreneurial outcomes. Nor would we suggest that collectively using all the words together as a kind of Trumpian word “salad” would be sufficient to bring about successful outcomes, but collectively these words could direct us towards a way of thinking that might facilitate the best outcomes given the limitations of the environment that entrepreneurs operate.

The corpus used by the control group is now dated, as it is approximately 10 years old. We have tried to control for this by ignoring words that have a specific context in time like Facebook, apps, data. We have chosen to ignore their presence in the discussion of results. In future research, it might be worthy to consider updating the control corpus to reflect the change in language usage.

We acknowledge that many entrepreneurs are not motivated by financial metrics, but rather by intrinsic factors, and our criteria for success might therefore be contentious. However, in acknowledging this limitation, we have clearly stated the assumptions upon which this study is based.
We have examined a single context of successful entrepreneurs from Silicon Valley. We do not suggest that these results are generalizable across all forms of entrepreneurship and all geographical regions. We acknowledge we intentionally omitted the influence of environment in this study.

7. Implications

The implications of this study are manifold. First, it represents an initial step in providing empirical evidence of an entrepreneurial mindset. There is a lot of work to be done to further understand and clarify what the differences between a highly successful entrepreneurial mindset is. The initial findings were encouraging, and suggest that further research should be carried out to test the propositions generated during this explorative study.

One implication for entrepreneurs is that there are mindsets that might serve as more constructive compared to other mindsets. The advantage of a mindset is that it can be learnt and adopted. It is not the same as a personality trait, which is relatively fixed. Lastly, this study goes a long way towards establishing what constitutes an expert entrepreneur mindset. This study is an initial step towards classifying the mindset based on empirical evidence.

Further research could build on the results we have by examining language use in multiple contexts. In addition, it would be interesting to see further research into the more technical aspects of language and the emotional characteristics of language. This might include using machine learning to examine spoken language in order to predict the likelihood of an entrepreneur’s future success. We also encourage deeper empirical studies into entrepreneurial mindset.

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8. References


