ENTREPRENEURIAL CREATIVITY AND INNOVATION

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Leonie Baldacchino

leonie.baldacchino@um.edu.mt

The Edward de Bono Institute for the Design and Development of Thinking



UNIVERSITY OF MALTA

ABSTRACT

Creativity and innovation by definition involve the creation of something new which, according to Barringer and Ireland (2006) "is central to the entrepreneurial process" (p. 15). Creativity and innovation are considered to be inseparable from entrepreneurship, which is in turn manifested in the act of starting up and running an enterprise. Pretorius, Millard and Kruger (2005) maintain that "creativity is clearly part and parcel of the entrepreneurial skills required to successfully start a venture" (p. 56). Entrepreneurs and their start-ups are considered to be "important agents of innovation" (Bosma & Harding, 2007, p. 16), not simply in terms of the products and services they provide, but also in terms of the technologies and processes that they utilise (Bosma & Harding; Watson et al., 1998). Start-up entrepreneurs could thus be argued to be, by their very nature, the essence of creativity and innovation.

This study explores ways in which start-up entrepreneurs are creative and innovative. Data was collected by means of a combination of in-depth interviews and telephone questionnaires with entrepreneurs who started up an enterprise in Malta between January 2002 and June 2007. Results indicate that the start-up entrepreneurs in this study display high levels of creativity and innovation and these are reflected in several ways. These entrepreneurs generate, develop and implement new ideas for their start-ups, foster a climate that is conducive to creativity and innovation, provide top-down support for creativity and innovation in their organisations, and offer innovative products and services through innovative methods of production and delivery.

Keywords: Creativity Innovation Entrepreneurship Start-ups SMEs

1. Introduction

Creativity and innovation are considered to be overlapping constructs between two stages of the creative process; both are necessary for successful enterprise (Martins & Terblanche, 2003). Creativity can be defined as "the production of novel and useful ideas" (Amabile *et al.*, 1996, p. 1155), while innovation refers to the implementation or "transformation of a new idea into a new product or service, or an improvement in organization or process" (Heye, 2006, p. 253).

By definition, creativity and innovation involve the creation of something new that "... is central to the entrepreneurial process" (Barringer & Ireland, 2006, p. 15). Creativity and innovation are considered to be inseparable from entrepreneurship, which is in turn manifested in the act of starting up and running an enterprise. Pretorius, Millard and Kruger (2005) maintain that "creativity is clearly part and parcel of the entrepreneurial skills required to successfully start a venture" (p. 56). Entrepreneurs and their start-ups are considered to be "important agents of innovation" (Bosma & Harding, 2007, p. 16), not simply in terms of the products and services they provide, but also in terms of the technologies and processes that they utilise (Bosma & Harding; Watson et al., 1998). Entrepreneurs could be argued to be, by their very nature, the essence of creativity and innovation.

Entrepreneurs implement creative ideas to introduce innovative products or services, or to deliver products or services in a new, more efficient, and hence innovative way. Innovation in New Product Development could include upgrading an existing product or developing a totally new concept to create an original and innovative product (Larsen & Lewis, 2007). This is also true for services and processes, thus innovation is recognised in the literature as ranging from the incremental to the radical. There is broad agreement that innovation should be present in all aspects of an organization and that it should be a mindset or a way of life (Abraham & Knight, 2001; Kuczmarski, 1996). Innovation should permeate through the various elements of the organization's business model in order to make it harder to be copied by competitors (Loewe & Dominiquini, 2006). Therefore, innovation is not only measured by the new products or services offered by an enterprise but also by new and more efficient ways of developing, producing or delivering products or services.

It is argued that creativity is not required solely in the domain of certain sectors or departments, or only in the development of new products or services, but is needed at every level of every type of organization. Creativity is seen as going beyond new products, new services and new and improved processes (Cook, 1998; Heye, 2006). Therefore if one can "better organize [one's] day or write a report in a new or more effective way, then this is every bit a creative act" (Gurteen, 1998, p. 7).

2. Methodology

This study explores ways in which start-up entrepreneurs in Malta are creative and innovative. Data collection and analysis took place in two phases: Phase One utilised a qualitative method of data collection while Phase Two made use of a quantitative method to substantiate the findings of the first phase of research. The data collected in Phase One was fully analysed before Phase Two was conducted, as the preliminary findings from the qualitative research were fed into the quantitative part of the study for further investigation.

For entrepreneurs to be included in this study their enterprises needed to meet the "new" and "active" criteria as described by Luger and Koo (2005). Enterprises which were set up in Malta in the last five years were considered to satisfy the "new" criterion. The "active" criterion was satisfied if the enterprise employed at least one full-time employee (excluding the entrepreneur) and was engaged in commercial activity.

2.1 Phase One: Personal Interviews

In Phase One, in-depth personal interviews were carried out with 13 entrepreneurs. Respondents were identified through the principal business incubation centre in Malta and through personal contacts. This first phase sought to provide insight into how entrepreneurs tap into their creativity and innovation to overcome the challenges they face starting up and running a new enterprise. In these circumstances, a qualitative approach was considered to be the most appropriate as it allowed in-depth exploration of the issues under investigation.

A tailor-made, semi-structured interview schedule that included the main questions, prompts and probes, was used to ensure coverage of key issues and to guide the interview process (Creswell, 1998). The interview schedule, which was also translated into Maltese, was rigorous enough to enable the identification of patterns and trends, but was sufficiently flexible to allow the interviewer to follow emergent leads (Frankfort-Nachmias & Nachmias, 1996). Questions were open-ended and as non-leading and as unambiguous as possible. All interviews began with the respondents being asked to provide some details about themselves and their start-up. These opening questions were non-threatening ice-breakers to help put the respondents at ease, build rapport between the interviewer and the interviewee and at the same time provide a wealth of information about the entrepreneur's background before moving onto a discussion on creativity and innovation.

Interviews were conducted in the English or Maltese language, depending on respondent preference, and lasted around 45 minutes each. Gilmore *et al.* (2004) suggest that the understanding of entrepreneurial phenomena is enhanced when they are examined in their own natural context. Consequently, all interviews were carried out on the respondent's business site. Interviews were audio-recorded and transcribed in full to ensure accuracy and objectivity in data collection and to facilitate analysis. Notes on the respondents' nonverbal behaviour were also recorded in the space provided on the interview schedules, in order to take advantage of the richness of information provided by the personal nature of this method of data collection (Frankfort-Nachmias & Nachmias, 1996). Prior to analysis, each transcript was e-mailed to the respective respondent for a process of member validation, whereby they were asked to read through the document and verify that the information was reported truthfully and accurately, and to make amendments if necessary.

2.2 Phase Two: Survey Data

In Phase Two, respondents were also required to meet Luger and Koo's (2005) "new" and "active" criteria. Selection of suitable research participants was carried out using purposive sampling (Shaughnessy & Zechmeister, 1997) to ensure that all the research participants met the research criteria. This led to the creation of a theoretically relevant sample which is deemed most appropriate in entrepreneurial research (Davidsson, 2004).

Since the second phase of this study was quantitative in nature, it required a larger research sample than the qualitative first phase. A sampling frame of "active" enterprises was compiled from the *Made in Malta Business Directory* and *ICT Business Directory* published by Malta Enterprise, and from the *Trade Directory* published by the Malta Chamber of Commerce. Since enterprises appearing on these directories were publicly advertising their products or services, it could be safely deduced that they were involved in commercial activity. This eliminated the selection of companies that may have been dormant or existed only as 'paper companies'. Each entry in these directories was looked up on the online *Malta Registry of Companies* to determine their registration number and their year of incorporation. Those companies registered during the last five years were considered to fit the "new" criterion and therefore included in this research sample, which also included the participants from the first phase of the research, other enterprises based at the local business incubation centre, and further personal contacts. The lengthy selection process yielded a sampling frame of 152 "new" and "active" enterprises. The entire sampling frame was contacted, out of which 90 entrepreneurs agreed to participate in the study. This response rate of 59.2% is attributed to the hectic schedule that is typical of many entrepreneurs of successful start-ups, which leaves them with little time to participate in research.

This second phase of data collection sought to substantiate the findings of the first phase of research concerning how entrepreneurs tap into their creativity and innovation, and to explore ways in which this is reflected in their start-ups. Since research on creativity is typically carried out in large organizations, a tailor-made structured interview schedule was constructed for the purpose of this second phase of the study. The construction of this interview schedule was based on the main findings of Phase One and on a number of standardized instruments dealing with organizational creativity. These include Goodman's *Organizational Creativity Audit* (1995), Ekvall's *Creative Climate Questionnaire* (1987), the Harvard Business Essentials' *Workplace Assessment Checklist* and *Psychological Environment Checklist* (2003), and the Advanced Practical Thinking Training Inc.'s *Innovation Index* (2001).

The final interview schedule contained items representing indicators of organizational creativity and innovation (product, service and process innovation), together with indicators of the psychological and physical environment of the start-ups under investigation. All the items in this part of the interview schedule were selected entirely on the basis of the literature reviewed and the instruments mentioned above. Replies required simple 'yes' or 'no' answers.

The interview schedule also gathered general information about the respondents and their start-ups, including the industry sector they formed part of, the year when their enterprise was set up, the number of employees, and the entrepreneur's previous managerial and start-up experience. The data gathered from this part of the interview was later used to classify and profile respondents.

The survey interviews in Phase Two were all administered over the telephone. This survey method was selected because of its non-intrusive nature, and because it was permitted by the relative simplicity of the research instrument (Frankfort-Nachmias & Nachmias, 1996). Interviews were conducted in English or Maltese during office hours or at such times as requested by respondents, and lasted approximately six minutes each. Answers were recorded on the interview schedule sheets which were then used by the author for analysis.

3. Results

Out of the thirteen entrepreneurs who participated in the first phase of this study, four had started up their enterprise in 2002, two in 2003, five in 2005, and two in 2006. Ten respondents were male and three were female while two were foreign and eleven were of Maltese nationality. One respondent was aged 25 or under, five were aged between 26 and 35, five were aged between 36 and 45, and two were aged 46 or over. All respondents in Phase One had completed tertiary level of education. Nine respondents had no previous start-up experience but eleven had formerly been employed in managerial positions.

In Phase Two, telephone interviews were conducted with 90 entrepreneurs whose enterprise had been registered with the relevant authorities in the last five years. All startups in this research sample fell into the SME category as defined by the EU. Micro and small enterprises together made up 96.7% (n = 87) of the sample. This is comparable to the population of enterprises in Malta, where micro and small enterprises together account for 99.3% of all Maltese businesses (National Statistics Office, 2006a & b). Out of the 90 respondents, 83.3% (n = 75) were male and 16.7% (n = 15) were female. When compared to the gender distribution of the population of self-employed with employees, females were over-represented in this sample. No data is publicly available on the gender distribution of new enterprise owners. Respondents with managerial experience constituted 81.1% (n = 73) of the sample, while those with experience starting up and running their own enterprise made up 38.9% (n = 35) of the sample. In addition, enterprises forming part of the ICT sector were highly represented in this phase of the research, constituting 25.6% (n = 23) of the sample. The start-ups with the second highest frequency in the sector variable were those which offer some kind of consultancy services, making up 8.9% (n = 8) of the sample. This was followed by those in the financial services sector, of which there were 6.7% (n = 6). Other sectors, including manufacturing, retail, import/export, hospitality, education and culture, media and entertainment, biotech, health, environment and energy were all represented by between one and four start-ups, making this a highly heterogeneous sample in terms of industry sector representation.

3.1 Phase One: Personal Interviews

The majority of entrepreneurs who participated in Phase One of this research claim that creativity and innovation play a crucial role in their start-up. Most entrepreneurs claimed that they are in some way creative and that their start-up is innovative as a function of their creativity. Sometimes they were able to specify ways in which they were creative and innovative; other times they were not.

For example, one respondent described his "creative approach". He explained that he begins a new project "with a *tabula rasa*, a clean slate ... just get rid of all your rules, just throw everything out of the window and start afresh". On the other hand, another respondent stated that he thinks he is "a bit creative" but does not know "how or what". He thinks it must be "something to do with character". Another entrepreneur claimed to have so many creative ideas that, were he to live another seven lifetimes, it would still not be enough for him to put them all into action. This same respondent explained that, when he puts these creative ideas into action, he often finds that his products are too advanced for the market.

This concern about products or services that were so innovative that the market was not yet ready for them was voiced by three other respondents. Six other respondents stated that they introduced products or services that were new to the Maltese market but which had been available abroad. For some, this innovation gave their start-up competitive advantage: "It was innovative for Malta ... that was our competitive advantage, that we harnessed technology ... That made us save a lot of money which was also an advantage to our customer".

Others voiced similar concerns regarding a market that was not ready for innovation: "it was new for Malta, but not for overseas ... and first we started to make the market aware of our products which sort of the Maltese market was not ready yet for them". Only one respondent admitted that his start-up simply offered "more of the same". Yet even he claimed to be "always trying to design new products ... always trying to create something new".

Creativity and innovation were deemed important for initial survival and for continued growth and success, with frequent references to initial innovative business ideas, a subsequent flow of new ideas for products or services, creative solutions to problems and innovative business processes. When asked about the main reason behind the success of his start-up, a respondent answered that he had: "the idea which is unique so that helped a lot". He also claimed that "the only way to keep ahead [of the competition] is to add new services, new ideas". Having an innovative business idea was also cited by another respondent as being an important factor in the success of her start-up. Another respondent claimed that an innovative product helped to "penetrate the market" with a high quality product with a considerable price tag attached. He believed this was only possible because customers knew their product was not a "me too" product but something very different, and it was one of the major reasons why his start-up was successful. Another respondent believes that the only way to succeed is to stand out by being unique, different and original. "Having new ideas is extremely important", he explained, "if you're going to be like everyone else, you're just going to fall in with the rest of the crowd". He believes that his "creative approach" ensures that his products are always innovative and that this is one of the major reasons why he has been so successful.

3.2 Phase Two: Survey Data

The results from the qualitative research in Phase One were enhanced with the quantitative research in Phase Two. This involved the computation of frequency counts and percentages for the items in part two of the telephone interview. Since these variables represent indicators of creativity and innovation, the statistics provide a general indication of entrepreneurial creativity and innovation and provide further depth in understanding how this is reflected in Maltese start-ups.

Well over half the owner-mangers in this study reported having launched products or services that were new to the Maltese market, while just over a quarter of these products or services were also new to the international market. This adds up to 16.7% (n = 15) of the total sample launching products or services that were brand new at the time of start-up. The majority (89.5%) of these entrepreneurs reported that their new-to-market products or services had been a success. Most entrepreneurs (71.1%, n = 64) reported that, as time passed, they added new products or services to their range, made improvements to existing products or service or services, and upgraded methods of production or delivery, all of which are indicators of product, service or process innovation.

The majority of start-ups in this study reportedly enjoy extensive generation and implementation of new ideas, both by the entrepreneurs and by employees. A considerable 94.4% (n = 85) of entrepreneurs personally generate and develop ideas for their start-ups, and 83.3% (n = 75) also encourage employees to come up with new ideas. Only two respondents had never implemented ideas proposed by their employees. Furthermore, only three of the entrepreneurs who did implement employees' ideas had witnessed no improvement in some aspect of their start-up.

4. Discussion

Findings from both phases of this study indicate high levels of entrepreneurial creativity and innovation in Malta. The entrepreneurs in this study generate, develop and implement new ideas for their start-ups, foster a climate that is conducive to creativity and innovation, and reap the benefits of such a climate by making good use of their employees' creative ideas. Furthermore, their creativity and innovation are reflected in the innovative products and services that they offer through innovative methods of production and delivery.

The personal interviews provided various examples of how these entrepreneurs employ their creative thinking skills to compensate for shortcomings, overcome obstacles and create opportunities in their start-ups. The telephone interviews later demonstrated that nearly all entrepreneurs personally generate, develop and implement new ideas for their start-ups. Together, these findings offer substantial support for the literature that argues that creativity is central to and inseparable from the entrepreneurial process (Barringer & Ireland, 2006), and confirms that creative thinking is an essential entrepreneurial skill (Pretorius et al., 2005).

Creativity and innovation are contingent upon a supportive climate and a top-down approach (Kuczmarski, 1996; Thacker & Handscombe, 2003). A supportive climate is in turn strongly shaped by the attitudes and practices of entrepreneurs who play such a central role in all business activities. The fact that the entrepreneurs who participated in this study generate, develop and implement new ideas for their start-up makes them positive role models for their staff. Furthermore they provide top-down support and foster an organisational climate that is conducive to creativity and innovation, according to the criteria dictated by Martins and Terblanche (2003) and by the Harvard Business Essentials (2003).

The extensive encouragement and implementation of employees' ideas are strong elements of a supportive creative climate (Martins & Terblanche, 2003). The high percentage of respondents who claimed to practice an open-door policy indicates ease of communication across all organisational levels. Together with the reported high levels of trust, this increases the likelihood that employees would share their ideas with colleagues and superiors, and therefore enhances creativity and innovation (Martins & Terblanche, 2003).

With regards to innovative products and services, it is interesting to note that several respondents in both phases of the study claimed that their products or services were not only new to the Maltese market but were the first of their kind in the world. Four respondents declared during the personal interviews that their products were too advanced for the market of the time. One of these respondents was even in the process of obtaining an international patent for his product. Furthermore a high percentage of entrepreneurs reportedly added products or services which were new to the market, or upgraded their existing products, services or methods of production or delivery as time elapsed. Although one may wonder whether these reportedly new-to-market products or services caused any sleepless nights to their competitors, or whether they were really only me-too products or trend-of-the-moment products (Kuczmarski, 1996), they may still be assumed to be indicative of some level of product, service and process innovation respectively.

5. Limitations and Directions for Future Research

Although this study was designed to address the research question as closely and accurately as possible, the research design and methodologies gave rise to a number of inherent limitations which could not be eliminated. Other limitations arose at a later stage of the study from circumstances that were beyond the researchers' control. The fact that the research sample was made up exclusively of entrepreneurs raised the possibility of biased responses where indicators of creativity and innovation were concerned. The respondents may have refrained from providing information which they felt would reflect negatively on themselves or their start-up. One should bear in mind that many entrepreneurs take great pride in their start-up, and some even refer to it as if it were their child. It is likely that, just as a parent would want to mask his/her child's shortcomings to strangers, entrepreneurs would be reluctant to admit the deficiencies of their start-up to third parties. Thus there is a possibility that they provided responses that they believed were socially desirable. There is also a likelihood that they replied truthfully, but their perception of the situation was somewhat distorted and biased. This would mean that they inadvertently provided misguided views of their start-ups' indicators of creativity and innovation.

One way to compensate for this limitation would have been to use triangulation, obtaining the views of employees and to personally visit the start-ups for direct observation. This would have been too time-consuming, excessively invasive and disruptive for the start-ups involved and was therefore avoided. One should also consider that it is unlikely that employees would be in a position to provide information regarding start-up success factors. The lifeblood of a start-up runs through the veins of its entrepreneur: no one else is better equipped to divulge which factors contributed to business success.

Nevertheless, it would be beneficial for future research into creativity and innovation in start-ups to include triangulation of methods to obtain a holistic picture and reduce as much as possible that bias resulting from perceptual data that is bound to influence results.

On a positive note, the use of purposive sampling ensured the selection of a theoretically relevant sample, which is highly recommended for entrepreneurial research (Davidsson, 2004). Thus although the small sample size does not allow confident generalisations to the population of start-up entrepreneurs in Malta, the sampling method used ensures that the enterprises under investigation were all perfectly suited for the purpose of this research. This in turn increased the validity of the findings that are largely in line with the relevant literature.

6. Conclusion

In summary, the entrepreneurs in this study are highly creative and their start-ups innovative. These entrepreneurs foster creative climates, provide top-down support for creativity and innovation, and offer innovative products and services through innovative methods of production and delivery. This confirms the central role of creativity and innovation to the entrepreneurial process (Barringer & Ireland, 2006).

This implies that the Maltese have migrated from the traditional role of traders to the more creative and innovative role of entrepreneurs. This augurs well if Maltese entrepreneurs are to meet the challenges of competing on a European and global market, as this demands enterprises to reinvent themselves, which in turn requires creativity and innovation (Xuereb, 2004).

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