

Decision making and Entrepreneurship

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Abstract

Decision making under uncertainty would seem most fitting for Innovation. Often the uncertainty inherent in innovation is the major hurdle business units and innovators have to manage to cross in order to innovate.

The paper will refer to some aspects of decision making relevant to Innovation and will give examples for such choices and decisions. In the aspect of decision making the paper will take a description behavioural point of view rather than a normative model one. On the innovation aspect we will focus on the decisions required in order to choose entrepreneurship and their link to decision making.

Keywords: *Innovation, decision-making process, technology transfer, behavioural models, entrepreneurship.*

JEL classification: L20, L26.

Introduction

The importance of innovation as an economic development tool has been out in the open for a long time (Chesbrough, 2003), and the research has been focused on Open Innovation as a move for companies finding it difficult to manage Innovation internally (Rahman and Ramos, 2012a; 2012b). The decision making focus has shifted in recent years from theoretical rational / normative models to a more behaviouristic outlook on decision making (Lieberman and Tversky, 1996; Kahneman, 2005; Ariely 2008; Ariely 2010). Since Innovation and Open Innovation require decision making under terms of uncertainty it would seem to be a relevant topic for behavioural interest.

Innovation requires decision making regarding several issues such as investment decisions, technical alternatives selection, and more. Open innovation involves search stages, identification and selection of partners / options, each requiring decision making under uncertainty. The uncertainty can be divided into uncertainty regarding the chances of obtaining results, and uncertainty as to the value / benefit from these results.

In both these cases the decision making heuristics that people have reported can shed interesting light regarding the processes involved.

The discussion below will merge two topics, the first being the issue of entrepreneurship and the types of people who select that career move, focusing on two specific types. The discussion will then analyse the decision to become

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entrepreneurs and present that dilemma that the seemingly reasonable decision, when looked at closely seems less than reasonable. The discussion will then turn to look at the behavioural analysis of making such decision and the heuristics that may have in reality led to that decision. The conclusion will include some points for those intending to use the heuristics in order to enhance the selection of entrepreneurship as a career change for these specific types discussed in the article,

1. Theoretical background

While theoretical models depicting the correct ways for decision making have been around for many years (Baron, 2008), but in recent years the behavioural approach has taken over (Ariely 2008; Ariely 2010), and has been sanctioned by Prof. Kahneman (2005) and others winning Nobel prizes. The theoretical background discussed here will refer to types of entrepreneurs, who select to be entrepreneurs and the reasons for that selection stemming from research in entrepreneurship, and the second background will refer to the behavioural influences on decision making that seem to be relevant to the decision made in the case mentioned above.

2. Entrepreneurship as a career move

The question of the character and characteristics of entrepreneurs have been research, as well as identifying types of people that would tend to become entrepreneurs, in order to better understand and perhaps direct that activity (Kuratko, and Hodgetts, 1998; Wickham, 2006). Entrepreneurship is a risky business and we hear statistics about the rate of failure of new enterprises all the time (NBS data?). It is even embedded in the names associated with the activity, venture capital, risk capital etc. We can therefore assume that the decision to take the decision to become entrepreneur is done lightly and certainly not when dealing with people who may have something to lose if they fail in their enterprises.

Explaining the decision to make the career move based on risk liking or on risk aversion, is a problem as it would require proving that these elements existed in the personality of the type we discuss prior to the point of making the decision. Otherwise we would assume a personality change, and a drastic one in a large group of people. Since both types we are describing here have gotten to the position in which they are making the decision based on many years of relatively consistent behaviour it would not seem likely that they could all undergo the same personality change. It is therefore something more basically askew in the human decision making process that we need to look for the answer (Noy and Ellis, 2003a; 2003b). We can safely assume that the personality of managers having risen to high levels after many years of dedicated service would not be more risk seeking than that of the organizations themselves in general, certainly not in the general managerial aspects required when initiating a new business (Noy and Ellis, 2003a; 2003b)

3. Entrepreneurship as a career decision

The entrepreneurship literature deals with the entrepreneurship process (Kuratko, and Hodgetts, 1998; Wickham, 2001; Kirby, 2003; Deakins, and Freel, 2003; Burns, 2007), and also tries to typify the professions / types/ personality of the best candidates to become entrepreneurs. It is my claim in this article that the type casting while perhaps statistically sound, is lacking cohesion in the explanation of the motives leading to the decision to select entrepreneurship as a career option. Of the several types mentioned in literature (Wickham, 2001), two were selected by me for analysis. They are in fact different aspects of the same type. However the nuances are important and explained below.

When selecting a career people do so from many reasons. However, once they have educated and trained themselves for a specific career a career change is a drastic move and would require for most of us a compelling reason to do so. When selecting a career change into entrepreneurship, two types, among others were identified and selected for this discussion (Wickham, 2001). The first is the unfulfilled manager and the second is the displaced manager.

3.1 *The Unfulfilled Manager*

The unfulfilled manager has reached the top of what he can receive and feels however, that he has not fulfilled his destiny. He has not left his mark on the world, has not yet "made the difference". He longs to extend his management capabilities to new domains and to test – successfully, his limits. He would like to form his own organization shaped in his image that would answer the market needs that would allow him to express his abilities in management. According to Wickham (2001) while the unfulfilled manager does not have any financial problems and his income is probably satisfactory, however he seeks fulfillment, or self expression. We are told that in order to achieve these two he considers the move to entrepreneurship, as a result of his confidence in his abilities carried on by his unfulfilled ambition.

3.2 *The Displaced Manager*

A variation on the above, this manager is a manager who although very successful and able has reached the end of his current career, as he is made redundant. The reason for that is not incompetence to continue in the job, but rather due to changes in the environment, mainly to the changes in the current economy. In many cases he will have the esteem of his colleagues and his workers and will have financial security (based on his severance package). He will recognize his abilities and may view the change as an opportunity for a career move. In some cases (e.g. early retired military personnel²) the severance package may include a

² That is typically true for support personnel in the Israeli IDF case, which is normally trained in more than combat capabilities, and could find employment in civil society easily enough. However, as the military normally offers retirement at an earlier age than civil society, such people seek fulfillment outside, enjoying training or adjusting elements in their retirement package.

training element that could help facilitate such a move. He would seek other ways for fulfilling his potential. Based on that understanding Wickham (2001) explains to us the "rational decision" which is to become an entrepreneur and seek the formation of an organization the displaced manager can shape in his image and be the leader off.

4. The Maslow scale

Maslow (1970) explains that people have needs they seek to fill and once these needs are answered new needs replace them. He order them in stages of preferences.

The most basic level is the level of **Physiological** needs such as hunger, sex thirst etc.; the next level up is the **Safety** needs: security, orderliness etc.; the third level is our need for **Love**: affection and social belonging; the next level is the need for **Esteem**: self esteem and recognition of status; the last is termed "**Self Actualization**", or as referred to here, self-fulfillment. These stages are drawn as a pyramid showing the different levels and are referred to as the Maslow scale. If we consider the Maslow Scale regarding the two entrepreneur types mentioned above, we can see that both have answered the basic needs regarding physical needs security etc. and in fact are just at the top level of needs, the need for self-fulfillment. According to Maslow their actions again would seem to be rational.

5. The un-logical part of the decision

The discussion of the Maslow scale explained the decision to change the career into something that could be deemed as self-fulfillment; however it did not require losing the financial security the two types mentioned above have before making the change. It is important to understand that losing the financial security is a complex issue for the types mentioned above. In most cases these are family men dependent on their salaries to maintain the wellbeing and security of their families, with limited financial assets they can live off without pay. Even for those owning such assets the change would result in a dramatic decrease in the standard of living, a move that is not rationally explained either by Maslow or by other rational models. It is important to recall that for such people there is a simple alternative and that is to go on with their current work, maintain their current financial security and perhaps create additional assets for them.

Self-fulfillment could be attained for them in other ways, they could become active socially, doing volunteer work, adopt a hobby, more into political life etc. all such moves, would not hurt their financial security in the near future and would allow them to express their talents and achieve some level of self-fulfillment. The election to become entrepreneur does not seem as logical as before.

Moving into a new career path such as entrepreneurship would entail their relinquishing their strong points in favor of adopting a new career demanding skill and capabilities they do not have and would need to acquire, or out-source. The unfulfilled manager would have to deal with complex financial issues relevant to

investment issues – shares, bonds, different and complex investment agreements, involvement in management and control by investors etc. he would need to learn the practices, the language and at least follow up on the professional he out-sourced the activity to. Dealing with investors, brokers, legal advisers specialized in investment agreement, VC and corporate control would require entering into a field of action the unfulfilled manager would probably have little understanding of. It would also require that he deals with other functions of management, from HR to supply and to R&D that he has never had to deal with before. He could of course just focus on his original forte, but in that case what career change has he made?

A similar analysis would be relevant to the displaced manager. Not being the CEO of the firm and thus involved in all the firm aspects he has specialized in a specific action or action type of the firm, and now he has to move to the whole organization view. This holistic point of view would demand different managerial skills than he has accrued so far, and would entail learning new activities and mastering new routines.

While the above is not considered impossible, it would seem to be a curious way of professional self-fulfillment, to fulfill by moving away from your strong point and acquiring new capabilities, with no or little prior experience.

6. The choice

The entrepreneurial life style and the choice of becoming one, how would they seem from the rational point of view?

The failure rate of new enterprises is high, statistics talk of different ratios of new enterprises that survive. Therefore there is a risk involved. This fact is not hidden or disguised, it is common knowledge and in fact is the part of the reason that governments and agencies feel that financial support is permissible and even should be encouraged. So a well-known fact is that many entrepreneurship cases and entrepreneurs fail. Therefore anyone considering a move towards entrepreneurship should know that his chances for success are limited. Not as small as winning a lottery but certainly smaller than winning a coin toss.

What about the value of the reward? Assuming that the entrepreneurship succeeds, and the entrepreneur manages to create an organization that grows enough to make the entrepreneur rich. The types mentioned above were not driven by the need to become extensively rich, but rather to fulfill themselves. As shown above, success as entrepreneurs will not bring them fulfillment in their professional career as charted above.

Is that really the rational move?

7. Behavioral analysis

The above average syndrome makes us consider ourselves above the average. Students in a class assume that they would perform better than the average of their colleagues in tests. Most of us assume that we are better drivers than the average and more (Beer and Hughes, 2010). These observations (Lieberman and Tversky, 1996) are interesting as it would seem that we naturally over estimate our

ability to perform, to be better than most. This heuristic drives us to gamble on our abilities to misjudge our chances and think that we can beat the odds. In his video on TED (http://www.ted.com/talks/lang/en/dan_gilbert_researches_happiness.html) Dan Gilbert in fact discusses some reasons for making mistakes regarding estimating odds and estimating the value of winning. He gives several examples of mistakes we make in estimating the chances of success or of certain occurrences. Based on the examples he presents we tend to overestimate occurrences that come easy to our mind. There are several such documented heuristics (http://www.ted.com/talks/dan_ariely_asks_are_we_in_control_of_our_own_decisions.html; http://www.ted.com/talks/dan_ariely_beware_conflicts_of_interest.html; http://www.ted.com/talks/dan_ariely_on_our_buggy_moral_code.html). Based on them the success stories we hear about entrepreneurs and the fact that we seldom if ever hear about the failures of such ventures – who haven't heard about Bill Gates, but how many of us can cite the names of CEOs of start-ups that went bankrupt the same year Microsoft went public?

According to the behavioral analysis we tend to over-estimate (Liberman and Tversky, 1996; Ariely, 2008, Beer and Hughes, 2010) events that come easy to our minds. The success stories and the fact that meet the products or firm names or the names of the entrepreneurs all the time, makes it seem as if entrepreneurship is successful all the time. We all know or heard about entrepreneurs, we all see them and hear their stories, but rarely do we see the ones who have tried crashed and left. We may hear of failures but mostly coupled with the second or third round which was successful. This tendency is also enhanced by the trait breadth of management and entrepreneurship (Beer and Hughes, 2010) which give us some examples of our success in that field and therefore enhance our belief in our ability to perform well – above the average. The managers making the decision regarding the career move can almost always find some support for their managerial ability, their ability to succeed and therefore believe that their chances of success are well above the average that makes the move towards entrepreneurship seem more promising.

So it would seem that part of the answer is the over-estimation of the success rate, due to the fact that we hear of many of the success, but rarely of final failures. The other enticement is the fact that entrepreneurship seems to be positively dangerous, it is recognized as dangerous, but unlike extreme sport, is not a problem for the insurance companies. The entrepreneurial adventure is considered positive and is even encouraged by society. In addition to making entrepreneurs, successful entrepreneurs celebrities, the plethora of support tools, funding tools, and government agencies and programs gives the move the legitimacy required.

Another topic that is mentioned in the Dan Gilbert lecture (http://www.ted.com/talks/lang/en/dan_gilbert_researches_happiness.html) is the mistaken estimation of the value of the rewards we manage to achieve. The new type of life, the high profile seems better more promising than the current life-style that seems to be taken for granted. The only comparison both types mentioned above make is based on the things that trouble them daily and the change therefore seems more promising.

Conclusions

The decision to become entrepreneurs, which seemed at first glance to be a rational decision according to the Maslow scale of needs, seems less so when looking closely at the success rate, and benefit derived from success for the decision makers, of the two types mentioned above. In order to keep short our discussion it is enough to assume that based on the Maslow Scale, answering needs at an elevated level would not come at the expense of already achieved fulfillment of more basic needs.

As these two types cannot be accused of typically making irrational decisions, the explanation sought here was in the behavioral section of decision making research. It has been shown that known behavioral deviation from the rational models are at work here, influencing both the estimation of the chances of success and the value of it.

In countries where a cultural preference for entrepreneurship does not exist, where the culture values soundness, continuance, regularity and tradition more than innovation would see it expressed also as a preference to either work for the government, a large organization or for a small family business and focus on maturing it. Or as Deakins and Freel (2003) explain, where the culture allows entrepreneurs to fail and to recover from it, viewing the failure as part of the training of entrepreneurs' of making them better entrepreneurs who can proceed towards successful formation of enterprises, such entrepreneurship activities will flourish. In other cultures where failed entrepreneurs are not allowed to recover and "get back into the game" this will place limitation on the drive towards selecting entrepreneurship as a career move. This will result in a smaller number of entrepreneurs, less enterprises and therefore less success stories, leading to even less perception of entrepreneurship as a viable career move for managers of the types mentioned above and creating an unfortunate positive feedback loop.

Only with a cultural shift that values innovation more (not necessarily replacing tradition, but maybe equating them) can entrepreneurship become a favourable way for mature experience managers and businessman to develop them further. In such markets that entrepreneurship will be more responsible more successful and the development of VC could be done more easily as the ventures to invest in would be more mature and actually safer. This will allow the entrepreneurs to develop a learning curve, to cooperate in partnerships based on their individual experience and to form mentoring tools. It will encourage more entrepreneurs to form more ventures, more success stories to learn from, to emulate and for the VC's – to select from. An added factor would be the large number rule that will allow VCs to flourish where there are many projects to select from.

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