

Predicting the Relative Values of social entrepreneurial opportunities.... .. an application in conjoint analysis

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Abstract : *A social entrepreneur is someone who creates and operationalizes an organization which is sustainable on one hand and, on the other hand, promotes livelihood opportunities for a community of people who need them. In other words the characteristics of a social enterprise will be distinctly different from traditional business enterprise in terms of primary stakeholders or beneficiaries, objectives and enterprise philosophies.*

In the emerging field of entrepreneurship, research had originally focused on entrepreneur as an individual having specific qualities and attributes, different from the rest of the population. In the next phase of research the field of entrepreneurship was looked upon as a nexus of individual entrepreneur and the opportunities of entrepreneurship which might emerge in the market. Also the relative values of entrepreneurial opportunities as perceived by the traditional entrepreneur, were ascertained in different contexts.

However, for the social entrepreneur, such a study to ascertain the relative values of social entrepreneurial opportunities, has not been undertaken so far.

Hence, in this paper on social entrepreneurship it is our objective to specifically identify and evaluate relative values of the characteristics in entrepreneurial opportunities from the perspective of the social entrepreneur. To this end a conjoint analysis approach has been adopted based on data collected for potential social entrepreneurs.

‘Social entrepreneurship is a term used to describe innovative approaches to solve social problems’ (Desa, Geoffrey, ISERC, 2007).

Recently, this topic has gained increased attention in conferences, case research and funding agencies interested in the topic. Researchers such as Drayton, founder of Asoka organization, one of the biggest organizations to promote social entrepreneurship in today’s world, described this topic as a body of innovative approaches to solve social problems. Subsequent research has further described social entrepreneurship as a process where the individual, the social entrepreneur, plays a significant role looking at attributes of the social entrepreneurship opportunity, evaluating them and then deciding whether to adopt these opportunities and turn them around to a real life enterprise.

According to Morato (2006) a social entrepreneur is someone who creates and operationalizes an organization which is sustainable on one hand and, on the other hand, promotes livelihood opportunities for a community of people who need them. In other words the characteristics of a social enterprise will be distinctly different from traditional business enterprise in terms of primary stakeholders or beneficiaries, objectives and enterprise philosophies (Dacanay, 2004). In a traditional business enterprise the primary stakeholders and beneficiaries are its stockholders like the owners and people who have invested in the business. In a social enterprise however, the primary beneficiaries could be a community or group of people who may not own the enterprise at all. Again the primary objective in a traditional business enterprise has an economic bottom line. A social enterprise on the other hand strives to improve the quality of life for a community or works towards empowerment of a group. Not that financial sustainability is not required in a social enterprise but it is not the reason for its existence.

In terms of enterprise philosophy traditional business enterprise accumulates wealth for its owners whereas in social enterprise wealth generated is distributed back to the community.

The distinction between a social enterprise and a regular enterprise is not always clearly definable. In fact there are various stages between purely social to purely economic enterprises, where at each stage an enterprise has a component of social and a component of economic or commercial values.

The field of entrepreneurship, in general, is relatively new as compared to many other fields on Management. However, in the recent few years there has been some significant research in the field, where many researchers have focused on exploring what makes this field distinctive from the other fields of enquiry. In the earlier years research also tried to differentiate entrepreneurs from other individuals in the population. They were looked upon as having special personality features, capable on innovation, attitude / endurance towards risk, leadership potentials and strong business acumen which enabled them to sense an opportunity even where it might not be apparent.

These features, it was thought, would make an individual emerge as an entrepreneur creating and leading one's own enterprise.

However, many such research efforts were relatively unsuccessful in trying to explain entrepreneurship (Gartner, 1990). Then research tried to conceptualize the field of entrepreneurship by looking at it as an interaction between individual entrepreneurs and entrepreneurial opportunities (Venkatraman, 1997).

Traditionally there is also quite an extensive research on what kind of entrepreneurial opportunities are perceived as attractive, which lead individuals to become entrepreneurs. In fact it is hypothesized that entrepreneurial opportunities are often objective in nature, available to everyone, but perceived in different lights depending upon the personality traits on the potential entrepreneur who looks at them. Such entrepreneurial opportunities start as what are called 'third party opportunities' (McMuller and Shepherd, 2006) which refer to opportunities which do not look like opportunities for anyone and everyone in the market but with individuals with right qualities they unravel their potential. These third party opportunities become first party opportunities if they emerge as especially

appealing or stimulating to a particular individual and the opportunity becomes real and ultimately gets transformed to the start of an enterprise.

In analyzing entrepreneurial opportunities which are considered or are available to the prospective entrepreneurs research does not often include the social attributes on entrepreneurial opportunities. However, there is a relatively small body of research who have considered social entrepreneurship initiatives of entrepreneurs in different social and commercial context.

Traditionally entrepreneurs are motivated by both economic and non-economic factors. For instance many entrepreneurs start their own venture even when they believe it would result in lower economic gain than some other career options.(Amit, MacCrimmon et al. 2000) . Also self-respect, achievement of personal and professional ideals may be more valued by entrepreneurs than making money (Guerrier and MacMillan 1981, Corman, Perles et al. 1988). Then there are other entrepreneurs who are community focused because of their motives around welfare issues of the community .

Whatever definition one adopts for social entrepreneurship the main concept still implies that social entrepreneurship is any form of entrepreneurship that has more than singular goal of profit maximization. Rather than attaining economic gain, social entrepreneurship represents centering on identifying, addressing and solving a wide variety of social problems (Drayton, 2002). This concept also relates to opportunities for reducing negative impact of business and creating social improvement in the process (Mair and Marti 2006; Zahra, Gedajlovic et al. 2006).

Having discussed the concepts leading social enterprise and also a social entrepreneur, one acknowledges in any case that for a social enterprise to exist and survive, it still needs to be economically feasible, sustainable and contain growth potential. The factor which differentiates it is whether the economic goals are the only goals in the enterprise or whether there are some other goals beyond economics, which drive the enterprise.

Along with defining social enterprises and thereafter social entrepreneurs, research has further considered characteristics, values, attitudes and personality traits of enterprising individuals who take up the prime mover seat in a social enterprise. For instance, past experiences, many of them early in life, distinguish a social entrepreneur from others (Barendsen and Gardner, 2004). Social ideals (Simms and Robinson, 2005) personal credibility in the form of past record of success which lead to the entrepreneur's ability/ aptitude to mobilize and access resources (Sharir, & Lerner, 2006, Thompson 2000) etc. all make up a social entrepreneur.

All the same, though there is a widespread approach in social entrepreneurship research focusing on person-centric perspective distinguishing a social entrepreneur from other persons in the population, another approach to social entrepreneurship research also exists, moving away from individual to looking at the role of characteristics in opportunities that represent potential for profit making in setting up commercial enterprise or social change in the case of social enterprise (Shane and Venkataraman, 2000).

These opportunities possess attributes to address either the economic motives of the potential entrepreneur or social missions of the potential social entrepreneur. It would be interesting to identify and evaluate the relative values of these attributes to the potential social entrepreneur which eventually provide the 'tipping point' to lead the individual actually becoming a social entrepreneur bringing in social change.

In this paper on social entrepreneurship it would be our objective to specifically identify and evaluate relative values of the characteristics in entrepreneurial opportunities which lead or are found attractive enough by individual to becoming a social entrepreneur.

The research question

In the field of traditional entrepreneurship researchers have used different approaches to conceptualize the field in a broad manner, sometimes focusing on the individual entrepreneur sometimes moving towards an understanding of the field as a meeting ground of both enterprising individuals and valuable entrepreneurial opportunities(Smith, B.R., Kickul, J. and Wilson, F, 2007, ISERC)

All the same research leading to an understanding of attributes in social-entrepreneurial opportunities and to what extent these are valued by a potential social entrepreneur, has not been considered so far, to the extent of author's knowledge. Thus it is the objective of this paper to provide the findings of an empirical research to determine which entrepreneurial attributes, in the social entrepreneurship context, significantly contribute to:

- (a) the assessment of attractiveness of the social-entrepreneurial opportunity, and
- (b) provides a “tipping point” for an individual in his or her decision to actually pursue a social entrepreneurial opportunity.

As mentioned earlier, Conjoint analysis is a multivariate technique to determine how a market develops preferences for products or services. The process starts by identifying key attributes which define a product or a service so that each product or service is uniquely described as a bundle of attributes . The product or service can simply be a concept or can be an existing one. Each key attribute also has different levels so that each concept represents a possible combination of levels of attributes. A representative sample is chosen from the market population, in the traditional way and the each respondent is given descriptions of concepts in the form of a ‘card’ Respondents then evaluate each concept in terms of overall liking, and rank all the concepts or cards in the order of preference .

The conjoint procedure then assigns “utilities”, or “part worth utilities” for each level within each attribute. These utilities determine the importance of

each attribute. Collection of trade-off data can be carried out by (a) full profile approach, or by (b) trade off approach. In this discussion the full profile approach will be presented.

For the current study the attributes and the levels to be used for conjoint analysis were determined by the exploratory analysis which always precedes a quantitative empirical study. For this purpose the authors of the study consulted with established social entrepreneurs in the region and also with funding organizations which often extend funding support to social entrepreneurs. These people or the funding agencies took the place of industry experts in the conjoint study.

The factors were the expected features or attributes in a social opportunity which were considered as attractive to the would be social entrepreneur. As emphasized by the industry experts, perhaps the most critical factor in a social or a regular entrepreneurial opportunity would be its 'expected performance', economically, for a regular enterprise and socially, for a social enterprise. Along with these two expected levels, some entrepreneurs would also expect environmental performance and even 'triple bottom line' performance combining economic, social and environmental performance within the same enterprise.

The factor called 'competitiveness' was also considered extremely important for entrepreneurs, not only for regular entrepreneurs but also for social entrepreneurs. This is because even in a social enterprise, the social entrepreneur would prefer to address a social concern in his/her own preferred manner, the way he/she believes would bring about the change, rather than another competitor trying to address it in another perspective.

Thereafter the attribute defining the technology focus of the opportunity could be considered as important, as in today's world a new technological breakthrough produces new product or service which has a capacity to address a social concern in a more superior manner. For instance, in a dehydration advocacy scenario, a new better medical formulation of an anti-dehydrate solution would have the capacity of mitigating the dehydrating situation in children in a far

superior manner. Thus a social entrepreneur would prefer to accept this superior technologically advanced focus of the product he/she is promoting rather than an inferior product which does not possess the advanced technological formulation.

The factor defining the preferred market for the prospective social entrepreneur would surely also be a factor considered critical by a social entrepreneur. The background of the social entrepreneur in terms of past experiences, values, attitudes, educational qualifications, work experience and so on often could also have an impact in the way the entrepreneur evaluates the opportunity.

Finally, some entrepreneurial opportunities have an idea which can draw external funding and thus has a possibility of drawing external funding. Again some opportunities do not have that direct possibility and thus would have do with internal in-house funding.

Factor :performance

- Label : Performance :***
- (1) Economic performance
 - (2) Social Performance
 - (3) Environmental Performance
 - (4) Triple Bottom Line

Factor :Competit

- Label : Competitiveness:***
- (1) Highly competitive
 - (2) Moderately Competitive

Factor : Focus

- Label: Focus***
- (1) high technology focus
 - (2) moderate technology focus

Factor Market

- Label***
- (1) niche market
 - (2) mass market
 - (3) defined target market

Factor :Background

Label : my background

- (1) matches my background
- (2) does not need to match my background

Factor : funding

Label : funding

- (1) Can draw external funding
- (2) Can do with internal funding

With the above factors and levels, a total of 192 possible profiles of social-entrepreneurial opportunity could be worked out. Since ranking of 192 profiles by individual respondent is very difficult fractional factorial design was used to reduce the options . Thus an orthogonal array of 16 plan/design cards and 4 holdout cards were generated as follows :

Performance	Competitiveness	Focus	Market	Background	Funding	
social performance	moderately competitive	moderate technology focus	niche market	does not need to match my background	can draw external funding	Design
social performance	moderately competitive	high technology focus	niche market	matches my background	can draw external funding	Design
triple bottom line	moderately competitive	moderate technology focus	defined target market	matches my background	can draw external funding	Design
triple bottom line	moderately competitive	high technology focus	mass market	does not need to match my background	can draw external funding	Design
environmental performance	highly competitive	moderate technology focus	niche market	does not need to match my background	can draw external funding	Design
triple bottom line	highly competitive	high technology focus	niche market	matches my background	can do with internal funding	Design
social performance	highly competitive	moderate technology focus	defined target market	matches my background	can do with internal funding	Design
environmental performance	moderately competitive	moderate technology focus	mass market	matches my background	can do with internal funding	Design
economic performance	moderately competitive	high technology focus	niche market	matches my background	can do with internal funding	Design
economic performance	highly competitive	moderate technology focus	mass market	matches my background	can draw external funding	Design
economic performance	moderately competitive	moderate technology focus	niche market	does not need to match my background	can do with internal funding	Design
environmental performance	highly competitive	high technology focus	niche market	matches my background	can draw external funding	Design

social performance	highly competitive	high technology focus	mass market	does not need to match my back-ground	can do with internal funding	Design
environmental performance	moderately competitive	high technology focus	defined target market	does not need to match my back-ground	can do with internal funding	Design
triple bottom line	highly competitive	moderate technology focus	niche market	does not need to match my back-ground	can do with internal funding	Design
economic performance	highly competitive	high technology focus	defined target market	does not need to match my back-ground	can draw external funding	Design
triple bottom line	moderately competitive	moderate technology focus	niche market	does not need to match my back-ground	can do with internal funding	Holdout
economic performance	highly competitive	moderate technology focus	mass market	does not need to match my back-ground	can draw external funding	Holdout
economic performance	highly competitive	high technology focus	niche market	matches my back-ground	can do with internal funding	Holdout
environmental performance	highly competitive	high technology focus	mass market	does not need to match my back-ground	can do with internal funding	Holdout

Data collection and Ranking of the profiles of 16 design cards plus 4 holdout cards.

The total of 20 profiles of the social entrepreneurial opportunity were written on 20 cards and given to the respondents to be ranked/ ordered according to preference.

The respondents were young entrepreneurs who were primarily students in the master's course in entrepreneurship. Before the respondents were asked to rank the 20 profiles/design cards, they were asked a screening question as to whether the enterprise they had in mind was a regular commercial enterprise or a social enterprise. Only the respondents who wanted to become social entrepreneurs were considered qualified to be included in the survey and were thus asked to rank the 20 profiles.

From a total of 147 entrepreneurs only 50 qualified to be social entrepreneurs and were thereby included in the survey and asked to rank the 20 profiles. To obtain an orderly ranking of the preferences and in accordance with the multiple-factor evaluation procedure, respondents were asked first to group the 20 cards into two groups, a preferred group and a not preferred group. They were then asked to rank the profiles within each group, finally giving a rank of '1' for the most preferred option to '20' for the least preferred option. Based on this two-stage process a uniform ranking of 20 cards was obtained.

Results obtained

Using conjoint analysis procedure in SPSS version 16, the following result was obtained:

Here for each factor/attribute, the averaged importance is worked out as also the part-worths or utilities for each level .(Malhotra, Naresh, 1993).

For each factor, the range of the utilities, as given by the (maximum utility – minimum utility) is computed . For the Factor 'i' let us call it R_i . The averaged importance is computed as

$$\text{Averaged Importance} = R_i / (R_1 + R_2 + \dots R_6).$$

The utilities or part worth's are computed using multiple regression approach with dummy variables for each level and the constant term emerging as part of the regression.

Predicting relative values or utilities for each factor defining attractiveness of the Social-entrepreneurial opportunity

Averaged	Utility	Factor	levels
Importance			
Expected performance	-.9436	I	environmental performance
38.53	.8062	I	social performance
	.7813	I	economic performance
	- 1.4812	I	triple bottom line
Competitiveness			
	.3312	I	highly competitive
11.16	-.3312	I	moderately competitive
Focus			
	.1344	I	high technology focus
4.53	-.1344	I	moderate technology
Market			
	.5250	I	niche market
24.21	-.9125	I	mass market
	.3875	I	defined target market
My background			
	-.0094	I	Matches my background
.32	.0094	I	Does not need to match
Funding			
	.6313	I	Can draw external funding
21.26	-.6313	--I	Can do with internal funding
	$I_{8.3688} = \text{CONSTANT}$		
Pearson's R = .922		Significance = .0000	
Kendall's tau = .762		Significance = .0000	
Kendall's tau = .433 for 4 holdouts		Significance = .0685	

One can see from the above table that the factor performance, out of all the six different attributes of the social-entrepreneurial opportunity, has the most critical impact on the entrepreneur's evaluation of the attractiveness of the opportunity. The next critical factor is market attractiveness, followed by funding possibility and so on.

Within each factor the utilities associated with the different levels give the relative attractiveness of the levels to the social entrepreneur.

Thus the level social performance is what the entrepreneur finds most attractive, though followed immediately by economic performance. This result justifies the fact that for a social entrepreneur, the social performance is of course the greatest requirement. However, the economic performance and economic sustainability of the enterprise is almost as important without which the enterprise cannot continue.

The next critical factor is market focus where the social entrepreneur finds it more attractive to go for niche market rather than addressing a whole population of mass market.

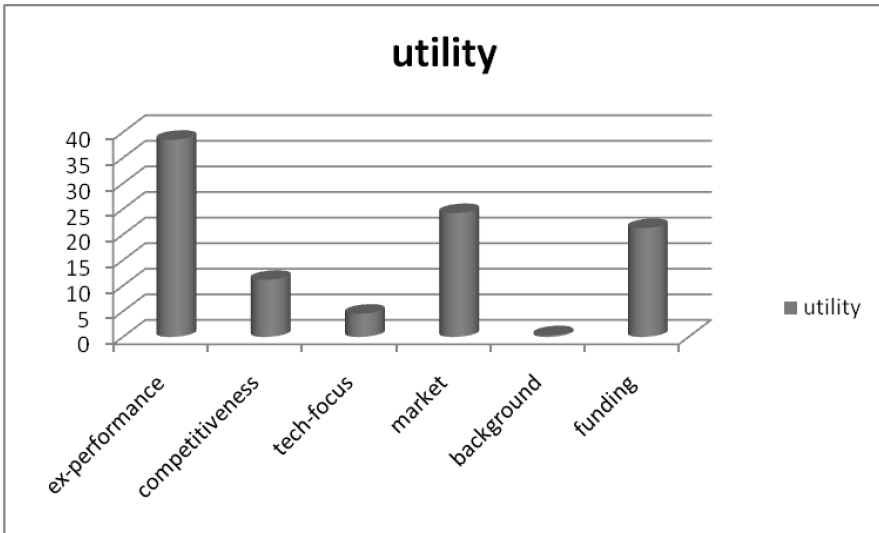
The next factor in order of preference is funding and one observes that the social entrepreneur would prefer to arrive at the funding from external sources. Thus an opportunity which has possibility of drawing external funding from some outside source or agency would be considered attractive.

The goodness for the conjoint approach is given by Kendall's Tau which takes up a value of 1 for perfect fit and 0 for a poor fit. The Kendall's Tau is separately evaluated for the profiles of the entrepreneurial opportunity included in the design/plan cards and for the holdout cards.

In the above data the Kendall's Tau for design/plan cards was good. Measured at 0.762 but the holdout cards it was not very significant. However, the significance in the first case was very much acceptable but the hold out cards

it was almost acceptable. (Significance should be < 0.05 for acceptance). The predicted values or utilities of the attractiveness of the six different factors are plotted below, having the same measures as given in the above table.

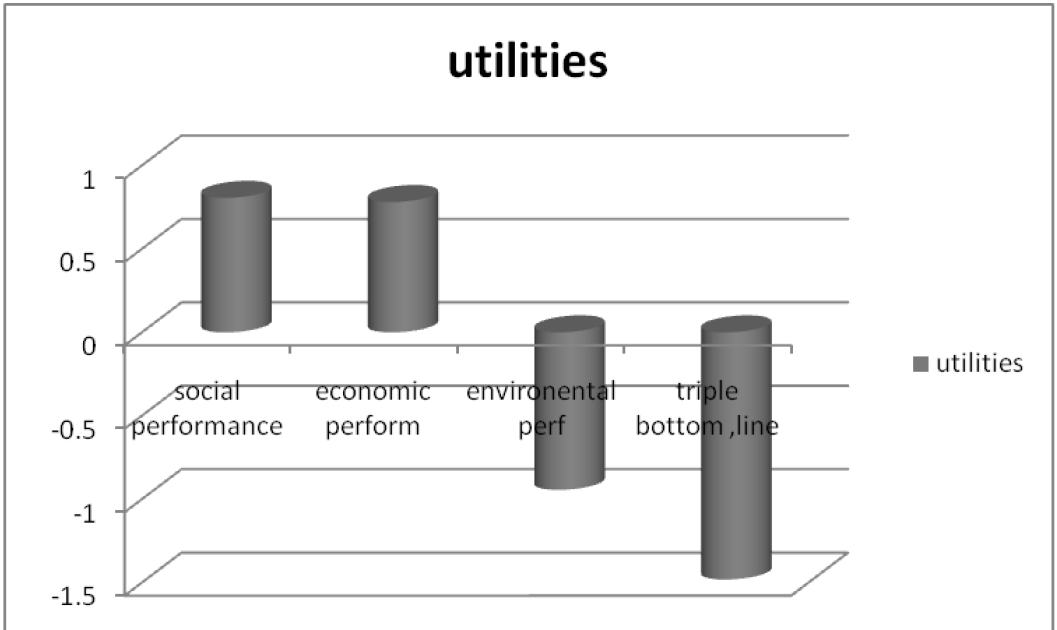
The predicted values of relative attractiveness of factors constituting social entrepreneurial opportunity.



For the most attractive factor ,the expected performance, the different levels and their part-worths or utilities are given as :

The part worths /utilities for the factor ‘expected performance’. (relative predicted importance :38.53)

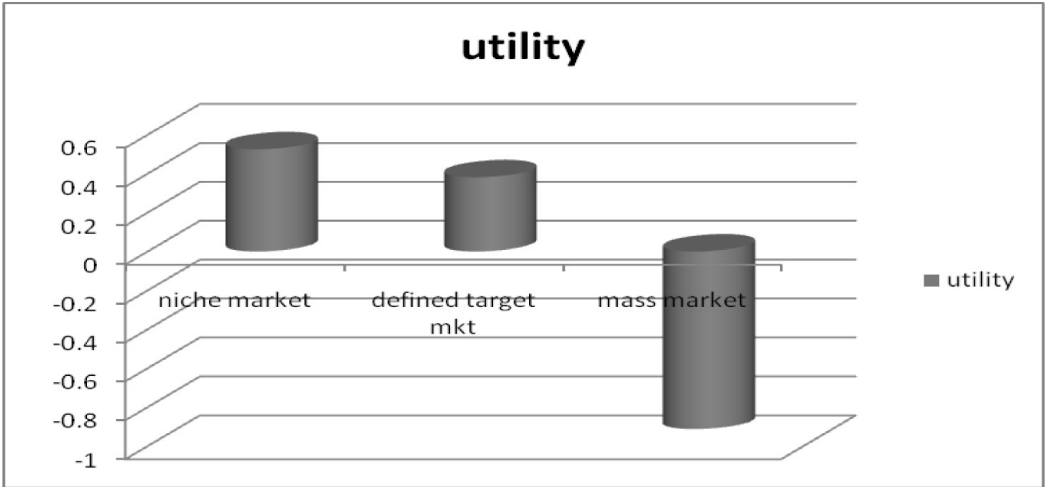
Expected performance



Thus the relative value/part worth for social performance is considered highest, immediately followed by economic performance too for sustainability of the social enterprise. An opportunity which would have these two expected performance potentials would be considered as possessing high relative importance to the social entrepreneur.

The part worths /utilities for the factor ‘market’, the next critical factor (Relative predicted importance : 24.21)

Market

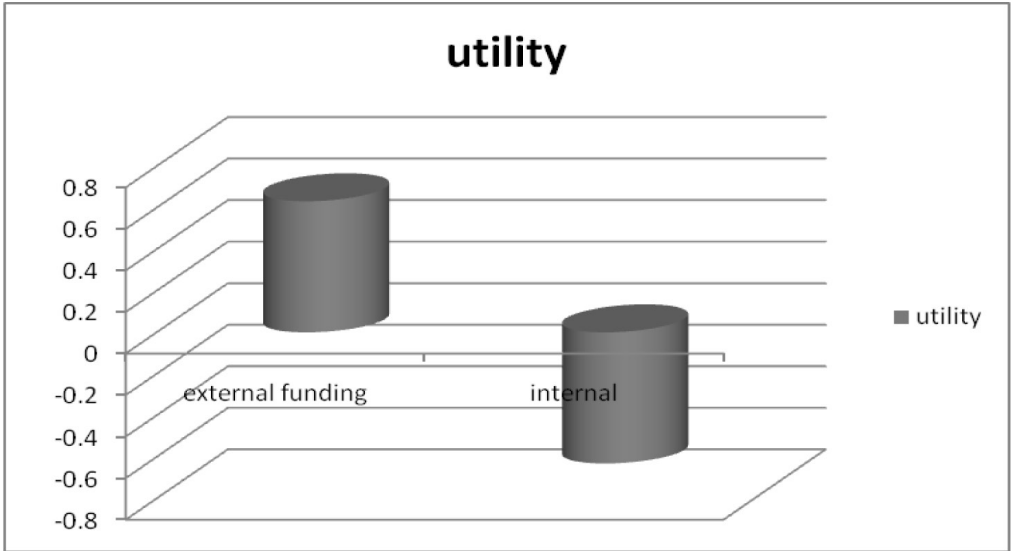


Thus, a social entrepreneur would consider niche market focus to be more attractive followed by well-defined target market than mass market in general.

The part worths /utilities for the factor 'funding', the next critical factor (Relative predicted importance : 21.26)

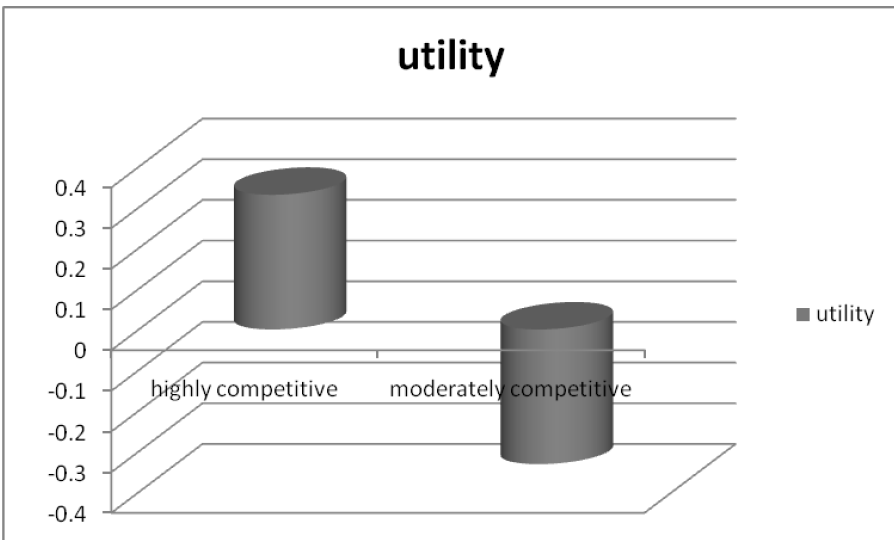
Thus one may observe that the possibility of drawing external funding would be considered as more attractive to the social entrepreneur, as compared to internal funding. This would be logical because often a social entrepreneur may not have the skill or networking connections to raise internal funding for setting up a social enterprise.

Funding



The part worths /utilities for the factor 'competitiveness', the next critical factor (Relative predicted importance : 11.16)

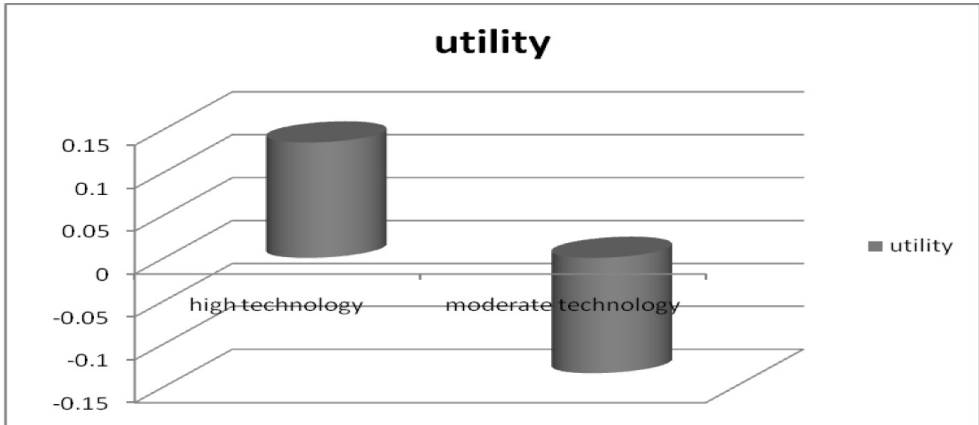
Competitiveness



Thus even in a social enterprise, potential for high degree of competitiveness is desired because the social entrepreneur would like to bring about the social change according to his/her specific ideas in his/her own enterprise, rather than another enterprise carrying it out in a different manner.

The part worths /utilities for the factor 'focus', the next critical factor (Relative predicted importance : 4.53)

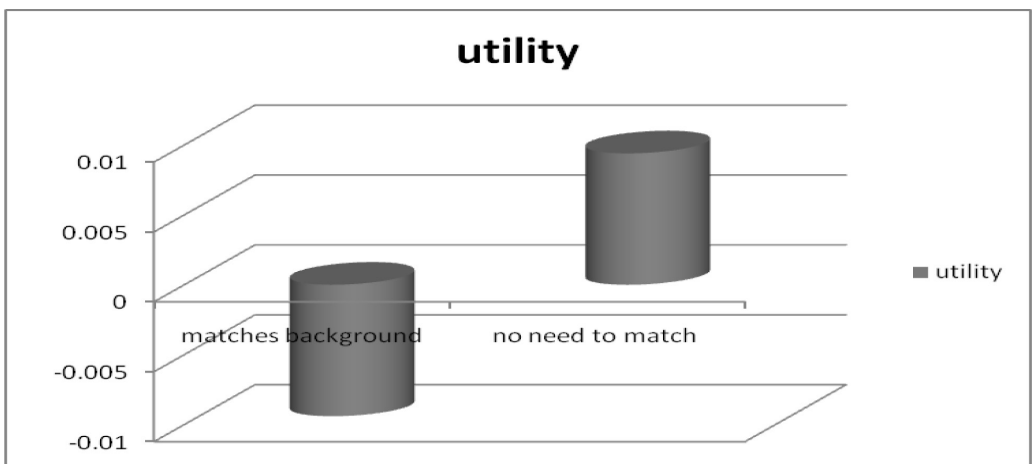
Focus



The above diagram exhibits that a prospective social entrepreneur considers high technology focus as more relevant and therefore attractive to bring about a social change.

The part worths /utilities for the factor 'background', the final factor

Background



(Relative predicted importance:0.32)

Hence the entrepreneurship opportunity does not need to match the background of the social entrepreneur. All the same this factor is quite insignificant in terms of attractiveness to a social entrepreneur.

Concluding remarks from the Conjoint Analysis

Using Conjoint Analysis we were able to predict the relative values of the attributes in a social entrepreneurship opportunity, from the perspective of a social entrepreneur. Since the utilities of the different factors and their levels are now available, given any social entrepreneurial opportunity, one can first examine its attributes in terms of the six attributes used in this study. Then for each of these attributes, one needs to ascertain/ estimate the associated levels. Once this is done, one reads out the corresponding utilities, adds the constant term and arrive at the predicted utility for this opportunity. The measure of this utility value would clearly indicate how attractive this opportunity would be to a social entrepreneur.

Thus one observes that social as well as economic performance of the entrepreneurial opportunity would be of value to the social entrepreneur, social being of slightly higher utility.. Of course expected performance, followed by market then followed by capacity for drawing funding are the three most prominent factors which would be considered attractive to the social entrepreneur. High technology focus and capability of drawing external funding would surely make it more attractive. The opportunity does not need to match the background of social entrepreneur but must have competitiveness inbuilt in the opportunity and have a defined or niche target market rather than a mass market.

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