DOES CONSUMER OR COMMUNITY GENERATED IDEAS TRULY REFLECT MARKET NEEDS AT ALL TIMES? A DIFFERENT PERSPECTIVE ON IDEA SELECTION BY CLASSIFYING THE SOURCE OF NEW IDEAS AND BY USING SOCIAL IDENTITY THEORY

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Abstract

It is well-known that consumers in online brand communities are excellent source of creative and innovative ideas for new products or services. Also, prior studies have shown that new ideas which reflect consumer needs and wants have the highest success-potential, and firms adopt such new ideas. It is generally assumed that consumer generated ideas 'always' reflect their needs and wants. However, this assumption may not be always true. For example, consumers in online brand communities of Dell, Starbucks, Nutella, etc., are found to post new ideas which are not only need-based, but they also post, 1) market trend based ideas, 2) radical ideas, or 3) redundant ideas, and hence, selecting the most promising consumer generated ideas is challenging for firms. To overcome this challenge, this study takes into account the source of each idea, such as, *need-based, solution-based, trend or competitor based,* and *mental invention,* in selecting the most promising idea. By combining this knowledge, that is, the source of each idea, with the degree of shared identity (shared agreement minus shared disagreement) towards each idea; this study help selecting the most promising idea by predicting the success potential of each idea, and its likelihood of being adopted by firms.

Keywords: Brand Community, idea screening, user needs and wants, success-potential, social identity

JEL Code: M31, M10

Introduction

Evaluating and selecting the most promising idea by experts in firms is an area much researched about. However, the fundamental problem of idea selection process still remains i.e. selecting a wrong idea and investing resources and time on it for further development (alpha error) or missing/filtering out the best ideas/opportunities (beta error). Ideas have to be evaluated before they can be selected for further development. Evaluating idea quality can be a grueling, expensive, and uncertain task. The traditional approach of idea screening is to ask one or a few experts to go over the transcripts of ideas and evaluate them (Urban and Hauser, 1993).

Firms, in their effort to develop new ideas for product development, are increasingly involving consumers/users (also communities)/employees/experts in their idea generation process (Fang, 2008), as firms are now aware of the fact that users possess the most important *sticky need or problem-knowledge* (Von Hippel, 2005). Some of such new idea generation methods are Idea generation contests, innovation contests, idea submission contests, etc. (Examples of such idea-generation by firms; P&G connect and develop, GM Idea submissions, Nokia Beta Labs, Google idea submissions, etc.(Screenshots attached in appendix 1 to 4)). This idea generation process results in thousands of ideas with varying degrees of usefulness and innovativeness, leaving the Firm's NPD team with a mammoth task to evaluate these ideas and select the best promising idea in order to focus its limited resources on those with the highest potential, after careful screening, which is both expensive as well as time consuming (Toubia and Flores, 2007).

Central research questions and objective of this study:

1. Why doesn't all user generated ideas succeed in the marketplace?
2. Under what conditions, can user generated ideas truly reflect market needs?
3. To provide an alternative method to identify the most promising user generated ideas.

1. LITERATURE REVIEW

1.1 Role of online brand communities on idea generation and idea screening

Empirical evidence suggests that ideas are also screened and selected collectively in brand communities and other open communities. The outcome of idea selection is dependent on two

factors: the quality of the available ideas, and the quality of the selection process (Rietzschel et al., 2006). Selecting the most promising idea is the most difficult task and it determines the eventual outcome (success or failure) of the Innovation process and new product development.

A new form of idea selection which is emerging among firms called collaborative filtering of ideas using communities. Communities are a form of social network and members continuously interact between each other. Communities are open, voluntary, and collaborative efforts of users – a term that describes enthusiasts, tinkerers, amateurs, everyday people, and even firms who derive benefit from a product or service by using it (Shah, 2005). A community has certain characteristics different from those of groups or individuals. The composition of community members, their personal background in terms of educational qualification, experience and expertise, passion or interest in community, level of interaction in community, number of members in the community, topics of interest for community, their motivation for community participation, position with community (core or periphery), etc., all of which are characteristics of community makes it different from the earlier groups or teams and hence idea selection process by community members produces a different result.

The ideas posted in online brand communities are reviewed by the community members, and like in scientific communities, the author of an idea receives valuable suggestions and comments on how to advance the proposed idea. As each idea is subject to feedback from the community, and members collaboratively select those ideas which appear most attractive to the community (Hierneth and lettl, 2008). Collective feedback from peer members of community enables early market sensing processes for the innovator and reduces uncertainties and risks (Lettl et al., 2008).

1.2 Member participation in online communities and Idea Networks:

When a community member posts a new idea or topic for discussion, other members participate by posting response comments. At any given point in time, there are several ideas which are posted by different members within an online community. However a community member is not obliged to respond to all the topics of discussion, in other words, member participation is voluntary. Hence, one of the *major decisions* that community members make is to decide-in

which among the various topics of discussions (e.g. Product-related ideas) within the community should they participate? Such a decision may reflect (or maybe influenced by) their interests, preferences, experiences, knowledge, etc., that they can share with their peers in the community. For each new idea that is posted in an online community, a new network is built around each one of such ideas where members exchange their views, opinions, share knowledge and information, in order to develop the idea further. No two 'idea network' will be perfectly (or necessarily) identical, in terms of the specific members who participate and contribute for each idea i.e., community members voluntarily chose as to which 'ideas' they want to participate in and contribute. Such voluntary self-selection of community members to participate towards different 'ideas' which are posted by other community members, creates different networks around each of the ideas and the size, intensity, growth rate, etc., varies for different networks.

1.3 Quality of ideas/concepts/designs/prototypes

A promising idea is one which is not only a good idea but it is also an idea which is useful and appealing to the firm. Thus a promising idea to one firm need not necessarily be the same for a different firm. Thus, evaluating and selecting the most promising idea, requires several dimensions to judge the 'quality' of ideas or to differentiate what is a good idea for a given firm? In this paper 'quality' means the quality of the **best selected idea** and NOT the **average quality** of all the ideas generated. However, different researchers have studied 'quality' of ideas using different dimensions and constructs such as effectiveness, novelty, workability, relevance, specificity, etc. Although a variety of constructs and methods have been used for idea assessment, these constructs map to one of the four primary dimensions identified by MacCrimmon and Wagner (1994): novelty, workability, relevance and specificity. Different ideas needs different experts for evaluation and selection. This means, the nature or the type of idea (to be screened or selected) determines the type of expert needed for that specific idea and if they already exist within the community. Since community is a mix of people who are also users, consumers, hobbyists, novices, apart from experts, etc., will provide adequate need-information necessary for idea selection. In this study, the quality of ideas will be measured in terms of Originality, Workability (acceptability, implementability), Usefulness, and Relevance (applicability, effectiveness).

1.4 Why online communities could work intelligently? Community centered research and collective intelligence.

According to Surowiecki (2004), the four conditions that characterize 'wise' crowds are 1) diversity of opinion, 2) Independent individual opinion, 3) decentralization and 4) aggregation-some mechanism for turning private judgments into a collective decision. If a group satisfies these conditions, its judgment is likely to be accurate (Surowiecki, 2004), as each person's judgment has two components: information and error and subtracting the error leads to the information. The underlying assumption is the crowd is holding a nearly complete picture of the world in its collective brain. However, any decision making mechanism has to be good under conditions of uncertainty which the right answer is seemingly unknown. The key, according to Surowiecki (2004), is not so much perfecting a particular method, but satisfying the conditions such as diversity, independence and decentralization, that makes a group smart.

2. Theoretical Framework and Proposition development

2.1 Sources of new ideas and classification of user or community generated ideas

Finke et al. (1992, 1995), explained that ideas are composed of functions, such as consumer needs, and their relation to forms, such as solutions. They have identified three types of cognitive searches for ideation such as, 1) identifying and defining a function and then performing an exploratory search for suitable form, 2) identifying a form followed by an exploratory search for a meaningful related function, and 3) creating the generalization of a predefined, restricted function-formulation. According to the authors (ibid), when none of these exist, the efficiency of the process and the quality of the ideas are reduced romantically. Adopting these ideas to the new product ideation context, authors Goldenberg, Lehman, and Mazursky (2001), a three-part classification of source variables for new ideas, such as, 1) **need sporting**-when need identification precedes product (form) development;2) **solution sporting**-when a form is identified and inventor searches for a suitable need (use), or both the need and solution are identified concurrently (usually as an improvisation), and 3) **mental ideation**-when according to the inventor's report the site is based on a decision to innovate and an internal cognitive process rather than on external market stimulus. In addition to these three types, ideas for new products are also opting by, 4) **market research** (Crawford 1977), and 5) by **following a trend** (Mcmath

and Forbes 1998)-when a product is developed to follow market trend in a different class of products.

2.2 Social identity theory and social exchange theory

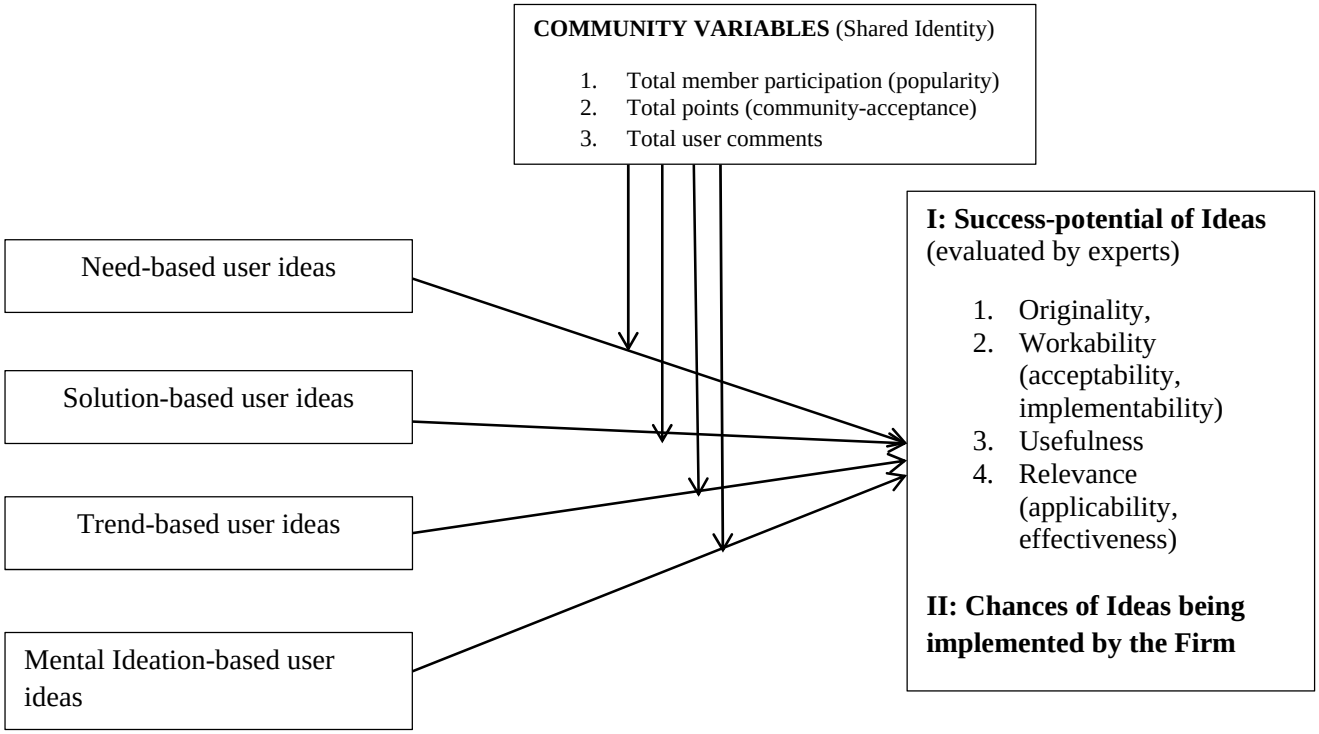
Insights are drawn from theories of social capital and citizenship behavior which suggests that an individual's relationship with other members elicits a sense of obligation and duty that drives participation in online communities (Nahapiet and Ghoshal, 1998; Posdakoff and Mackenzie, 1994). Social exchange theory[1] suggests that expectation of private rewards, that is, the benefits that are available to contributors but not to free riders, such as social status/reputation and learning, motivate member participation and their contribution in online communities (Von Hippel and von Krogh, 2003). Based on these theories, this study assume that users share their prior knowledge, experiences, and tacit need and use related knowledge which they acquire in the course of using a certain product with their peers at low or no cost.

2.3 Conceptual Framework

In a prior study, Divakaran (2012) have shown that online community-based variables are potential signals (mirror effect) of overall market (off-line) behaviour. In that study, the author have shown that community-based free release variables such as total member participation, total user comments, average rating and user words, are potential predictors of community members (who participated in online activities during the prerelease period) future adoption behaviour, and also potential signals of overall community's future adoption behavior. These community-based variables are into account in this study, and data collected on these community-based variables for each "idea" posted in the community, is taken as a proxy for measuring the degree of shared interest (social identity) among community members towards each idea posted in the community. Thus, by combining all the information presented in the above sections which are collected from existing theories and literatures, the following conceptual framework is developed, and thereafter various propositions of this study are presented.

[1] Social exchange theory which has its roots in economics, psychology and sociology, posits that all human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives.

Fig. 1: Conceptual Framework



Source: Author's own elaboration

Proposition 1: Under conditions of high degree of shared identity, selection of **need-based** user generated ideas by firms will have a positive effect on market success, and hence,

1a. need-based ideas are more likely to be selected and implemented by firms

Proposition 2: Under conditions of high degree of shared identity, selection of **trend-based** user generated ideas by firms will have a negative effect on market success, and hence,

2a. trend-based ideas are less likely to be selected and implemented by firms

Proposition 3: Under conditions of low degree of shared identity, selection of **solution-based** user generated ideas by firms will have a positive effect on market success, and hence,

3a. solution-based ideas are more likely to be selected and implemented by firms

Proposition 4: Under conditions of low degree of shared identity, selection of **mental ideation-based** user generated ideas by firms will have a positive effect on market success.

4a. mental ideation-based ideas are more likely to be selected and implemented by firms

Proposition 5: Under conditions of high degree of shared identity, among the four types of user generated ideas, the likelihood of being **selected and implemented** by firms, will be in the following order; 1) need-based ideas, 2) solution-based ideas, 3) mental ideation-based ideas, and 4) trend-based ideas

Proposition 6: Need-based and **trend-based** user generated ideas will have a higher degree of shared identity (reflected by total member participation (popularity), community acceptance (total points accumulated), and total user comments posted) than **solution-based** and **mental –ideation** based ideas.

3. Discussion and Conclusion

This conceptual paper provides a framework for identifying the most promising innovation ideas which are created by users for the benefit of firms, by classifying each idea based on, 1) its source (such as in need-based, trend-based, solution-based, and mental ideation based user generated ideas), and 2) social identity theory. This framework is developed from the social perspective of ideas itself (i.e., 'Idea Networks'), rather than the social context of individual users or the community itself, all of which were the focus of prior studies. In other words, for each new idea that is posted in an online community, a new network is built around each one of such ideas where members exchange their views, opinions, share knowledge and information, in order to develop the idea further. No two 'idea network' will be perfectly (or necessarily) identical, in terms of the specific members who participate and contribute for each idea i.e., community members voluntarily chose as to which 'ideas' they want to participate in and contribute. Such voluntary self-selection of community members to participate towards different 'ideas' which are posted by other community members, creates different networks around each of the ideas and the size, intensity, growth rate, etc., varies for different networks.

The conceptual framework and the propositions developed in this paper can be used as the basis for further empirical research. This paper primarily focuses on the fuzzy front end of innovation especially in identifying the most promising ideas from an overload of ideas, using network analysis. However, future research can focus on extending this line of research into

validating whether those promising ideas resulted in increased sales of products developed from such ideas. Moreover, it remains to be investigated whether the network position of individuals in one idea-network is the same in other idea-networks. This is very important because it is unclear whether the individuals in a specific community occupy a similar position as long as they remain an active member.

In this paper, the study is limited to the ideation process only (i.e., Idea generation and Idea selection), however, from the social context of ideas. Hence, further research is need in order to understand these idea-networks much deeper by using other network metrics like number of community members (core vs. periphery), network density, centrality measures, etc.

Firms can facilitate growth of their brand communities and provide toolkits for idea selection. Alternatively, firms can look out for open communities which are related to their products and look for new ideas. The problem of overload of ideas is not an issue while involving communities because members flocks to only those ideas which are relevant, interesting, novel and specific, leaving out the bad ideas.

REFERENCES

Divakaran, P. K. P. (2012). Pre-release member participation as potential predictors of post-release community members' adoption behaviour: evidence from the motion picture industry. Behaviour & Information Technology, 32(6), 545-559.

Fang, E. (2008). Customer Participation and the Trade-Off Between New Product Innovativeness and Speed to Market. Journal of Marketing, 72(4), 90-104.

Finke, A. R., Ward, T. B., & Smith, S. M. (1992). Creative Cognition. Cambridge, MA: MIT Press.

Finke, A. R., Ward, T. B., & Smith, S. M. (1995). Creative Cognition Approach. Cambridge, MA: MIT Press.

Goldenberg, J., Lehmann, D. R., & Mazursky, D. (2001). The Idea Itself and the Circumstances of Its Emergence as Predictors of New Product Success. Management Science, 47(1), 69-84.

Hierneth, C., & lettl, C. (2008). How communities of practice evaluate entrepreneurial processes: A conceptual analysis. research Policy (under review).

Lettl, C., Hienerth, C., & Gemuenden, H. G. (2008). Exploring How Lead Users Develop Radical Innovation: Opportunity Recognition and Exploitation in the Field of Medical Equipment Technology. IEEE Transactions on Engineering Management, 55, 219-233.

MacCrimmon, K. R., & Wagner, C. (1994). Stimulating Ideas Through Creativity Software. Management Science, 40(11), 1514-1532.

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. Academy of Management Review, 23(2), 242-266.

Posdakoff, P. M., & Mackenzie, S. B. (1994). Organizational Citizenship Behaviors and Sales Unit Effectiveness. Journal of Marketing Research (JMR), 31(3), 351-363.

Rietzschel, E. F., Nijstad, B. A., & Stroebe, W. (2006). Productivity is not enough: A comparison of interactive and nominal brainstorming groups on idea generation and selection. Journal of Experimental Social Psychology, 42(2), 244-251.

Shah, S. K. (2005). Open Beyond Software. In D. Cooper, C. DiBona, & M. Stone (Eds.), Open Sources 2.0: The Continuing Evolution (pp. 339-360). Sebastopol, CA: O'Reilly Media.

Surowiecki, J. (2004). Wisdom of Crowds : Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations. New York: Doubleday Publishing

Toubia, O., & Flores, L. (2007). Adaptive Idea Screening Using Consumers. Marketing Science, 26(3), 342-360.

Urban, G. L., & Hauser, J. R. (1993). Design and Marketing of New Products: Printice hall, englewood Cliffs, NJ.

Von Hippel, E. (2005). Democratizing Innovation. MIT press, Cambridge, MA.

Von Hippel, E., & von Krogh, G. (2003). Open Source Software and the "Private-Collective" Innovation Model: Issues for Organization Science. Organization Science, 14(2), 209-223.

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