



**6th Annual Conference of the Academy
of Innovation and Entrepreneurship
(AIE 2013)**

**Innovation and Entrepreneurship
for Inclusive and Sustainable Development**

Oxford, United Kingdom

29-30 August 2013

CONFERENCE PROCEEDINGS

Co-organised by

Technology and Management for Development (TMD) Centre, University of Oxford

National Entrepreneurship Research Centre, Tsinghua University

Research Centre for Technological Innovation, Tsinghua University

Sponsored by



Saïd Business School
UNIVERSITY OF OXFORD



ISIS
UNIVERSITY OF OXFORD INNOVATION



Journal of
Entrepreneurship
in Emerging Economies

Edited by TMD Centre
Oxford Department of International Development
University of Oxford
www.tmd-oxford.org

First version: 06 September 2013
This version: 06 September 2013

International Entrepreneurship

Boundary-crossing job mobility, new product area entry and the performance of entrepreneurial ventures

Gina Dokko (Graduate School of Management, University of California, USA)

Geraldine Wu (Department of Management and Organizations, New York University, USA)

Contact email: gdokko@ucdavis.edu

How does moving across career boundaries affect an entrepreneur's new venture? An entrepreneur's career experience is a critical resource for a startup, so when entrepreneurs cross industry or functional boundaries to lead startups, they may lack specific human capital that they need for performance. At the same time, the diverse experience they carry can enhance innovation and exploration in the startup. We highlight important consequences that occur for startups when their leader has crossed career boundaries, using a multi-industry longitudinal sample of high-technology firms. We find that entrepreneurs who cross functional boundaries to lead startups are more likely to enter into new product areas. We also find that an entrepreneur's industry boundary-crossing increases the probability of a failure for the startup, but that it also increases the probability of an IPO.

Open innovation implementation through open innovation communities: The case of Starbucks

Irene Rufo (Universidad de Sevilla, Spain)

María del Rocío Martínez-Torres (Universidad de Sevilla, Spain)

S. Toral (Universidad de Sevilla(Spain)

Contact email: rmtorres@us.es

The proliferation of information and communication technologies has made possible the use of Internet as a channel for customer integration, leading to a radical transformation of the innovation processes. Today, open innovation communities represent one of the most common strategies for open innovation implementation. This paper analyzes the case of Starbucks that created the "My Starbucks Idea" platform as a place where customers can share, discuss and evaluate ideas. More specifically, this paper aims to test to what extent the decision making of the organization is influenced by the preferences of the community. For this purpose, the received comments and votes and the size of shared ideas have been extracted from the My Starbucks Idea website.

R&D cyclicity and credit constraints: Comparative micro-evidence from 10 new EU members and two data sources

Kadri Männasoo (Tallinn University of Technology, Estonia)

Jaanika Meriküll (University of Tartu, Estonia)

Contact email: merikyll@ut.ee

The opportunity cost approach suggesting a countervailing cyclical effect between R&D and short-term investments is the subject of theoretical and empirical debate. The lack of firm-level panel data on R&D and ambiguous indicators for demand fluctuations has hindered empirical testing of theories suggesting pro- or countercyclical R&D in interaction with credit constraints. Our contribution provides comparative firm-level evidence for the effect of credit constraints and

OPEN INNOVATION IMPLEMENTATION THROUGH OPEN INNOVATION COMMUNITIES: THE CASE OF STARBUCKS

I. Rufo

Facultad de Turismo y Finanzas,
Universidad de Sevilla

Avda. San Francisco Javier, s/n,
41018, Sevilla, Spain

irene.rufo@hotmail.com

M. R. Martínez-Torres

Facultad de Turismo y Finanzas,
Universidad de Sevilla

Avda. San Francisco Javier, s/n,
41018, Sevilla, Spain

rmtorres@us.es

S. Toral

E. T. S. Ingeniería, Universidad de
Sevilla

Camino de los Descubrimientos, s/n,
41092, Sevilla, Spain

storal@us.es

ABSTRACT

The proliferation of information and communication technologies has made possible the use of Internet as a channel for customer integration, leading to a radical transformation of the innovation processes. Today, open innovation communities represent one of the most common strategies for open innovation implementation. This paper analyzes the case of Starbucks that created the "My Starbucks Idea" platform as a place where customers can share, discuss and evaluate ideas. More specifically, this paper aims to test to what extent the decision making of the organization is influenced by the preferences of the community. For this purpose, the received comments and votes and the size of shared ideas have been extracted from the My Starbucks Idea website.

Key Words— Open innovation, open innovation communities, collective intelligence, My Starbucks Idea.

1. INTRODUCTION

Organizations have widely acknowledged the role of innovation in economic growth. Technological developments have forced higher competitiveness and shorter innovation cycles and, as a result, companies increase their efforts in innovation activities [1]. As a further step, companies have begun to open their innovation processes by incorporating both internal and external resources, leading to the so called open innovation paradigm [2]. Open Innovation is a recent strategy related to the management of information in organizations, and relies on the idea that potential opportunities and advantages can be gained outside the formal boundaries of organizations [3], [4]. This is especially important in companies offering daily use products such as coffee, which require a constantly updated external feedback to measure its progress and development.

This paper is focused on a representative example of this kind of organizations: Starbucks. Starbucks is a company that pursues to satisfy a traditional necessity in a different manner. In its own web site, Starbucks affirms that its mission is to inspire and nurture the human spirit, only one person, one cup of coffee, and a neighborhood at a time. The distinctive element of this company in respect to the competitors is to offer its clients a quality service at all levels. In this line, Starbucks CEO's and chairman, Howard Schultz determines the necessity to renovate the company's image by retracing the company's steps in the same direction it did from its origin: orienting it to giving personalized attention to each customer. Starbucks, like most companies, is aware of the importance of the new technologies and the diffusion of internet as a tool that can be reached by many customers [5]. The open innovation website is actually a fundamental element in the strategy of restructure. Through the "My Starbucks Idea" website, users can not only post and share ideas with the rest of users, but they can also comment and vote other previously posted ideas. These two last forms of participation, commenting and voting, allow users to exert some pressure on the organization highlighting their preferences. However, the organization receives thousands of ideas and must individually asses each one. Moreover, not all the posted ideas, even if they are quite popular, can be implemented by the organization, since they can be prohibitive due to its high cost or they can be in conflict with the image and mission of the organization.

This paper investigates the preferences of users and the decision making followed by Starbucks when adopting ideas. More specifically, the paper tries to test to what extent the preferences of users are influencing the adoption of ideas. The remainder of the paper is structured as follows: next section explains the concept of open innovation and its implementation through open innovation communities. Section 3 details the methodology for extracting the data from "My Starbucks

Idea" website and the considered variables. Section 4 shows the obtained results and finally section 5 concludes the paper.

2. OPEN INNOVATION

The term open innovation was coined by Prof. Henry Chesbrough (2003) and refers to the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. This paradigm assumes that firms can use external ideas and internal ideas, as well as internal and external paths to market in order to advance their technology. As a difference to the traditional innovation model, this paradigm also assumes that the risks derived from opening the innovation, such as the access to valuable information by competitors or the loss of control over the innovation process, can be compensated by a richer number of innovative ideas.

Several classifications have been proposed in the literature about open innovation. Martínez Torres et al. distinguish between product and process innovations [6]. According to the degree of openness in innovation, open innovation strategies can also be classified as outsourcing, crowdsourcing and online contests [7]. Online contests are intended as competitions among users in order to reach the best idea/proposal and the winner is rewarded. However, the generation of ideas through a website can be considered as a form of crowdsourcing, which is not intended as a competition. They have popularized thanks to the emergence of Web 2.0 [8]. Firms such as Microsoft, Dell, IBM, BMW, and Nokia increasingly invest in virtual communities to solicit user contributions as part of their innovation processes. This trend is explained by the increase in digitalization and the decrease in the costs of communication that have led to an exponential growth of user innovation platforms [9].

3. METHODOLOGY

Starbucks' open innovation website identifies members' contributions as ideas. When posting an idea, registered users must choose one of fifteen subcategories that respond to three basic aspects of the company: product, experience and involvement ideas, Table 1.

Product ideas	Coffee & Espresso Drinks
	Frappuccino & Beverages
	Tea & other drinks
	Food
	Merchandise & Music
	Starbucks Card
	New Technology
	Other Product Ideas

Experience ideas	Ordering or Payment & Pick-Up
	Atmosphere & Locations
	Other Experience Ideas
Involvement ideas	Building Community
	Social Responsibility
	Other Involvement Ideas
	Outside USA

Table 1. Categories and subcategories of posted ideas.

Once an idea is submitted and shared, community users can vote and comment the posted idea. Commenting an idea means that the comments are attached below the posted idea in the form of a thread of discussion. In general, comments can support, criticize or refine the shared idea and, as a result, a debate among users can emerge through these comments. Even the original author of the idea can participate answering some questions. Voting an idea consists of adding or subtracting 10 points to its current score. As long as ideas receive more votes, they are promoted to rising positions in terms of popularity within the web. There is a separate category, called Ideas in Action, that shows those ideas that either have already been launched or that are currently coming soon or under review. Therefore, this category includes those ideas that have been considered by Starbucks for their implementation.

Three variables have been considered in this study: Votes, which refers to the current score of each idea, Comments, defined as the number of received comments by each shared idea and Size, which is the size of the content of shared ideas measured in characters. The three variables have been extracted using our own crawler, which explores the website content extracting this information from the source code of HTML webpages. As a result, a total of 99528 ideas distributed over the fifteen categories of Table 1 were analyzed.

The category of Ideas in Action has also been browsed. In this case, the number of ideas is 897, and the number of received comments and size have been extracted for all of them (the number of votes is not available). Additionally, the categories under which these ideas were classified by Starbucks have also been collected.

4. RESULTS

First, a correlation analysis among the three extracted variables for the fifteen categories of ideas is performed. Obtained results in Table 2 show that participation by means of voting and commenting are positive correlated, while the size of shared ideas is not correlated with the other two variables.

	Votes	Size	Comments
Votes	1,000	-,027**	,487**
Size	-,027**	1,000	,101**
Comments	,487**	,101**	1,000

** Correlation is significant at the 0,01 level (2-tailed).

Table 2. Correlation among variables.

This result suggests that those ideas that receive a higher number of votes are also generating a debate around them. Therefore, both votes and comments can be considered as relevant information to identify users preferences. However, the size of ideas is not relevant for identifying good ideas.

The second analysis consists of comparing the distribution of the three considered variables over the fifteen categories of ideas. Figure 1 illustrates the mean value and confidence intervals of the variable Votes per each of the fifteen categories of ideas. This figure highlights that the categories *Starbucks cards*, *Ordering, Payment & Pick up* and *Coffee & Espresso Drinks* are the three categories that receive more votes, while *New Technology* is clearly the category worse evaluated by users. These results suggest that Starbucks users are more biased towards the core activity of Starbucks, which are basically coffee and the ordering process. Starbucks card refers to the loyalty program of the company and its associated advantages. Taking into account that the Starbucks Card is the rewarding system to the loyalty of users and the fact that the majority of the ideas provided by the community in this category are due to extend its owner's benefits, obviously there's a tendency among My Starbucks Idea members to support this ideas by voting them.

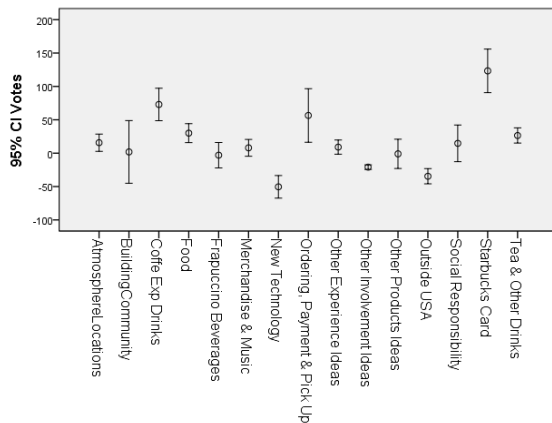


Figure 1. Mean value and confidence intervals of Votes.

Figure 2 details the mean value and confidence intervals of the variable Size. In this case, three categories (*Frapuccino*, *New technology* and *Outside USA*) exhibit

the highest values. The rest of them are more or less similar in size. This result can be explained because this particular categories have a wider scope, and consequently ideas need to be more precise and require longer explanations..

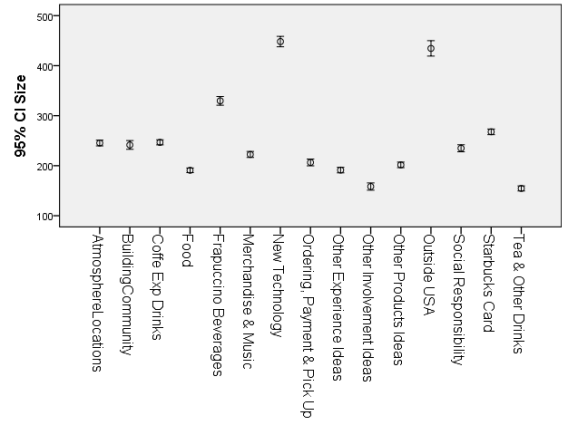


Figure 2. Mean value and confidence intervals of Size.

Finally, Figure 3 shows the mean value and confidence intervals of the variable Comments. The most popular categories in this case are *Coffee & Espresso Drinks*, *Frapuccino* and *New technology*. It is interesting to notice that *Coffee & Espresso Drinks* occupies a relevant position in both Votes and Comments. This could be because Coffee is the main product of Starbucks, and people tend to associate the brand to coffee. Therefore this is perhaps the main category in which users are involved in. It is also interesting to see that New technology is in general worse evaluated, but arouses an important debate among users. This point can be explained by the specificity of contributions related to this category. In contrast, the debate in the categories *Outside USA*, *Food* and *Merchandise & Music* is noticeably minor.

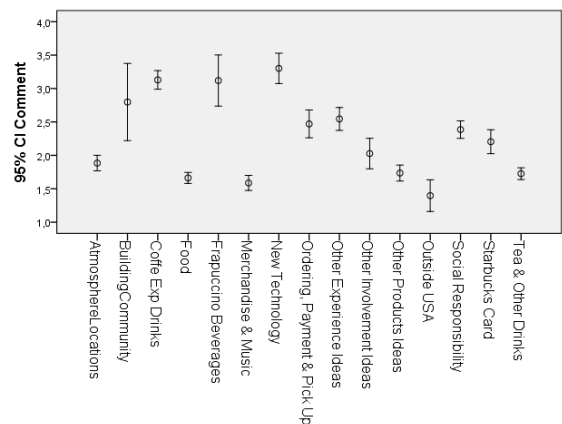


Figure 3. Mean value and confidence intervals of Comment.

A Kruskal-Wallis test has been performed to test the equality of means of the three considered variables in

each of the fifteen categories of ideas. The Kruskal-Wallis test is a nonparametric version of one-way analysis of variance. The assumption behind this test is that the measurements come from a continuous distribution, but not necessarily a normal distribution. The test is based on an analysis of variance using the ranks of the data values, not the data values themselves. The low p value in Table 3 for each variable suggests that the null hypothesis can be rejected, so it can be concluded that the obtained mean values in Figures 1-3 are significantly different.

	Votes	Size	Comments
Chi-square	4713,32	6046,31	2507,39
df	14	14	14
p	0,000	0,000	0,000

Table 3. Kruskal-Wallis test.

Any of the previous ideas belonging to the fifteen categories have the opportunity of becoming a reality. If the contribution is viable and it is considered interesting by Starbucks's quality team support, it can reach the *Idea in Action* status. This additional category groups all these ideas, which are in turn divided into four stages depending on their development status: under review, reviewed, coming soon and finally launched ideas. Figure 4 shows the distribution of the number of Ideas in Action per category of Ideas. *Coffee & Espresso Drinks*, with 190 ideas in Action, is clearly the category in which more ideas have been selected by Starbucks. Again, this result is in line with the main product offered by the company. The second and third places correspond to *Other Experience Ideas* and *Social Responsibility*.

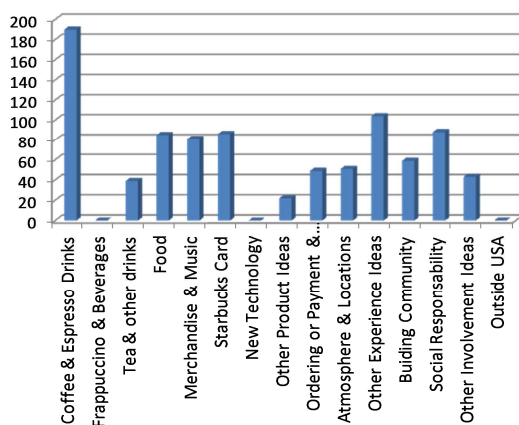


Figure 4. Distribution of Ideas in Action per category.

Other experience ideas category provides space for those comments not instinctively classifiable in the other categories like partners (workers, baristas), other types of rewarding loyalty, or decoration changes. This category includes the feeling of users about Starbucks, and this is proprietary issue for the company which considers the experience of taking a

coffee in Starbucks as a distinctive experience. The same can be said about social responsibility. Starbucks aim to be an environmental-friendly green brand, concerned about social problems in both the whole world and every single neighborhood.

4. CONCLUSIONS

This paper is focused on open innovation community of Starbucks, and it is aimed to distinguish between users and company preferences when deciding about the most interesting shared ideas. Both of them are logically focused on the main product of the company, coffee and espresso drinks. However, users tend to promote those ideas reporting them more comfort and personal benefits, while the company is more focused on those issues related to the brand image, like the beliefs and feeling associated to the experience of taking a coffee.

10. REFERENCES

- [1] M. P. Hekkert, S. O. Negro, "Functions of innovation systems as a framework to understand sustainable technological change: Empirical evidence for earlier claims", *Technological Forecasting and Social Change*, Vol. 76, Iss. 4, pp. 584-594, 2009.
- [2] Chesbrough, H. *Open innovation: The New Imperative For Creating and Profiting from Technology*, Harvard Business School Press, Boston, 2003.
- [3] E. K. R. E. Huizingh, "Open innovation: State of the art and future perspectives", *Technovation*, Vol. 31, no. 1, pp. 2-9, 2011.
- [4] M. R. Martinez Torres, "Application of evolutionary computation techniques for the identification of innovators in open innovation communities", *Expert Systems with Applications*, Vol. 40, Iss. 7, pp. 2503-2510, 2013.
- [5] M. Sigala, "Social networks and customer involvement in new service development (NSD)", *International Journal of Contemporary Hospitality Management*, Vol. 24 No. 7, pp. 966-990, 2012.
- [6] S. Toral, M. R. Martinez-Torres, P. Di Gangi, "User Innovations Through Online Communities From the Perspective of Social Network Analysis", *The First International Conference on Advanced Collaborative Networks, Systems and Applications*, COLLA 2011, pp. 40-45.
- [7] Huff, A., Moslein, K. ; Reichwald, R., *The Future of Crowdsourcing: From Idea Contests to MASSive Ideation Leading Open Innovation*, In: *Leading Open Innovation*, MIT Press, pp. 241-261, 2013
- [8] B. L. Bayus, "Crowdsourcing New Product Ideas over Time: An Analysis of the Dell IdeaStorm Community", *Management Science*, Vol. 59, Issue 1, pp. 226-244, 2013
- [9] D. Mahr, A. Lievens, (2012), "Virtual lead user communities: Drivers of knowledge creation for innovation", *Research Policy*, Vol. 41, Iss. 1, pp. 167- 177, 2012.