Letter from Academia

Lean start-up companies by means of crowdsourcing

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Abstract. Lean start-up approach provides both small and larger companies a novel, important and useful way to organize their business development, while reducing related high risks. Traditional start-ups face a multitude of significant challenges and risks. A study by Ghosh showed that as many as 75% of all start-ups fail. Earlier research has preliminarily demonstrated that crowdsourcing has the potential to reduce the risks of failure of start-ups, as well as overcome some of the inherent challenges lean start-ups face. We argue that crowdsourcing can significantly improve the leanness and agility of start-ups' business functions.

Keywords. Lean start-up, crowdsourcing, innovation, open innovation

1.   Introduction

Crowdsourcing (Howe, 2006; Howe, 2008) has been one of the driving forces of change in many fields of life, from the approaches to (self-)organise aid of volunteers during natural catastrophes to crowdsourcing the whole software design & development and marketing of a mobile phone. According to Howe (2008), "crowdsourcing isn't a single strategy. It's an umbrella term for a highly varied group of approaches that share one obvious attribute in common: they all depend on some contribution from the crowd". This contribution can consist of one or several of the following: ideas, concepts, information, knowledge, working time, financing, or other resources (Helander, Jussila, & Kärkkäinen, 2013).

One widely accepted useful definition that describes the concept of crowdsourcing is by Jeff Howe (2008). This definition describes crowdsourcing as an "act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.".

The added value that can be derived from various crowd-based activities and the crowd contributions can be of quite various types, from cost- related issues such as cost-and time-savings to innovation related value, such as new information and knowledge, which the company probably would not have been able to come up with by the use of internal workforce only.

Some studies have referred to crowdfunding as a possibility for start-ups (e.g. Blank, 2013; Cornell, 2014), but they have not studied the possibilities of crowdsourcing in more depth.

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2.   Lean start-ups and crowdsourcing

Traditional approaches to build new enterprises bear large risks and often are a "hit-and-miss" task: writing business plans, pitching them to investors, building teams and expertise, developing products, and selling the products as well and as hard as the enterprises can. Some studies claim that as many as 75% of all start-ups fail (Gage, 2012), due to involved risks.

Recently, novel approaches have risen, which employ a very different approach which could be called as "lean start-up" approach. Some key features of lean start-ups include quick experiments over elaborate (and time-consuming) planning, fast and in-depth customer feedback over intuition, and iterative design over traditional extensive up-front development (Blank, 2013) Some of their major objectives include fast learning, elimination of waste, minimizing risks by taking no unnecessary leaps of faith, as well as efficiency and agility (e.g. Ries, 2011; Blank, 2013). This methodology and its major concepts have changed and even revolutionized the way many successful start-ups operate.

On the one hand, start-up companies which are normally relatively small in size, are in a position that they are able to extensively and flexibly make use of crowds and crowdsourcing. Start-ups are often flexible and eager in adopting new ways of working and new knowledge for instance due to the leanness of their organization structure, as well as the yet non-standardised processes and ways of working. On the other hand, they face a multitude of challenges which can be solved efficiently by crowdsourcing. For instance the small size of start-ups, as well as their position as a novel company with commonly limited networks, markets and funding, lead to serious limitations in available resources to carry out the various tasks related to their business. Due to their limited resources, they may also be able to react fast to new outside stimuli that may enable them to focus better on the activities they centrally should carry out to facilitate their business, and may benefit significantly from such lean and agile approaches (see e.g. Blank, 2013). Start-ups may benefit significantly from novel approaches such as crowdsourcing that help them strategically to concentrate on the development of their own core competences while outsourcing even almost everything else.

There are various ways the leanness in start-ups can be achieved, and how the risks involved in start-ups can be even significantly reduced. A relatively recently popularized approach which has a large potential for leaning up start-up companies' processes and minimizing their risks is crowdsourcing. To our knowledge, no earlier studies have explored in more depth the possibilities of crowdsourcing, as a whole, to lean start-ups. Some studies have referred to crowdfunding as a possibility for start-ups (e.g. Blank, 2013; Cornell, 2014), but they have not studied the possibilities of crowdsourcing in more depth.

3.   Mechanisms behind crowdsourcing added value

It has been found that in many cases, non-expert crowds and crowdsourcing can provide solutions that are as good as the solutions of internal company experts, or in some cases, even better than what would be achieved by company internal personnel and experts (e.g. Brabham, 2008). Here, we try to briefly explain why and in which situations the results of crowdsourcing can be this good, and why start-ups might thus significantly benefit from crowdsourcing efforts.

There are different ways of approaching why and how crowdsourcing can bring added value to companies and their basic processes. First of all, crowds can provide various

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types of resources (e.g. information, work, funding) for carrying out a tasks that replace or add to the internal resources normally used to carry out a task. Second, the resources can complement the internal resources by for instance providing information or knowledge (e.g. about customer needs) that would be difficult or even impossible to access or obtain without crowds. Third, crowds can be a source for serendipity, i.e. they can increase the possibility of unplanned or accidental solutions and discoveries (such as penicillin or Viagra). Serendipity has been considered in the literature to form an integral part of the creative process in the arts and humanities, social sciences and the sciences (Foster & Ford, 2003).

In addition to merely providing resources that are similar to the ones that would be used in carrying out the tasks internally, crowdsourcing utilizes significantly the concepts of Wisdom of Crowds (Surowiecki, 2004) and Collective Intelligence (Malone, 2008; Bonabeau, 2009). These can be understood as approaches making use of crowds in such a way that a crowd of ordinary people can in certain conditions make better judgments and decisions than best expert can do (concept of Wisdom of Crowds by Surowiecki 2004), or approaches that people and computers jointly can make better decisions than people, groups or computers have individually been able to make (concept of Collective Intelligence by Malone 2008). Both rely on the concept of diversity (meaning diversity of information, knowledge, cognitive skills, cultural background etc.). Crowdsourcing can also diminish the negative impacts of groupthink (Esser, 1998).

4.   Conclusions

Crowdsourcing can help to outsource even a major part of start-ups' business functions that a start-up normally performs internally, at the same time helping to create e.g. market experiments in the manner belonging to lean start-up methodology, and simultaneously, help to significantly reduce several business risks, which traditional types of outsourcing cannot similarly enable. This new mode of lean start-ups enabled by crowdsourcing requires, essentially, actually only an initial business idea from the entrepreneur(s), while nearly all the other traditional business functions, including funding and product development, can be outsourced by means of crowdsourcing.

This means a radically new way to reduce the extensive risks of start-ups, and make their operations as agile and lean as possible. Crowdsourcing can radically facilitate the way for start-ups to make use of the lean start-up methodology, and to become more lean. For instance, crowdfunding can enable start-up to make the decision to start developing a new product or a service not before a viable amount of customers have already pre-purchased the product. The start-up, however, does not even have to develop the product in-house, but by means of crowdsourcing platforms, it can make use of the best experts around the world to develop the product. Furthermore, crowdsourcing makes it possible to execute the experiments and hypotheses testing related to lean start-up methodology with greater speed and agility that would be possible using only internal resources or traditional outsourcing.

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