



Crowd innovation fosters new business opportunities

How business can profit from group-oriented innovation approaches

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The term “crowdsourcing” is relatively new, coined by Jeff Howe’s 2006 article “The Rise of Crowdsourcing” in Wired magazine (Howe, 2006). Today, Wikipedia, as THE best-practice example of crowdsourcing, records the world’s collective knowledge at an impressive rate of approximately 10 million words per month.

However, the idea of leveraging the masses is by no means new. For example, in 1714 the British government under Queen Anne advertised a reward, the Longitude Prize, for anyone who could find a simple and practical method for the precise determination of a ship’s longitude. The Board of Longitude offered £20,000, which roughly translates to £35 million today (Officer & Williamson, 2011), to the first person who could find a practical method for determining longitude within an accuracy of 30 nautical miles (56 km). Hundreds took part in the project and in the end the prize for solving this challenge was awarded to a number of people.

Instead of trying to fix the problem internally, the British government posed the question to the public, which yielded great success. This example shows the power of presenting challenges and sourcing ideas from the crowd. And it holds true today, perhaps even more so with the speed and depth of technological innovation. Businesses are facing constant challenges with limited resources in terms of time and money, and the crowd is an amazing source of fresh insights and ideas. The ideas collected from the crowd offer new opportunities for businesses to get ahead, and stay ahead, of the competition.

In this respect, crowdsourcing could be seen as part of the innovation process of a business – we could term this “crowd innovation”.

To explore this further, we conducted structured interviews with a range of global experts in crowdsourcing. We considered methodology, processes and best practices on how best to make use of crowdsourcing for innovation purposes, and gathered insights for those planning to initiate it in their business. But first, let's look in more detail at what we really mean by "crowd innovation".

1. What is crowd innovation?

In recent years, the terms "crowdsourcing" and "open innovation" have been used again and again in the press, in articles and in companies. But what lies behind these buzzwords?

Crowdsourcing describes the process of sourcing ideas and solutions from a large crowd of people. It is often conducted by publicly presenting the problem on the Internet for anyone to participate. However, a "challenge" can also be addressed to a particular group, such as all employees in a company or a particular expert group. In all cases, participation must be voluntary. Typically an incentive for the winning solution is offered, and in many cases personal satisfaction and social recognition are the main rewards.

There are many ways to use crowdsourcing. In 2010 Oliver Gassmann, a professor at the University of St Gallen in Switzerland, analyzed companies active in crowdsourcing and clustered them into five categories, as shown in Table 1. Since then, crowdsourcing ideas have been developed in entirely new areas. For example, Kickstarter (www.kickstarter.com), which launched in April 2009, initiated the category of crowd funding platforms on which projects are brought to life through the financial support of the crowd. So far more than \$350 million has been pledged by more than 2.5 million people.

Open innovation describes activities undertaken by companies in collaboration with others, thereby sharing both risk and reward. Open innovation is commonly used in R&D and marketing. Activities are typically clustered in "outside-in processes", "inside-out processes", and "coupled processes" (Gassmann & Enkel, 2006).

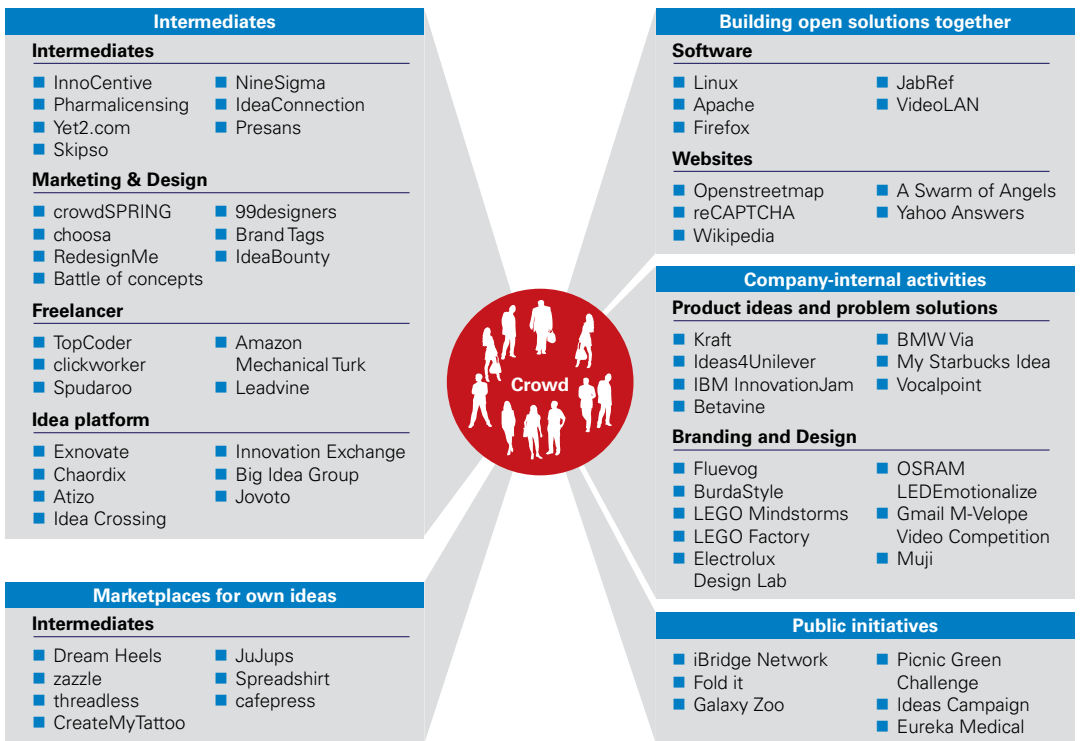


Table 1 Companies working in the different varieties of crowdsourcing

Source: Arthur D. Little analysis

An outside-in process utilizes knowledge and creativity from outside the company, such as from universities or private research. An inside-out process works the other way around in that the company gives away knowledge and creativity – usually for a fee – e.g. in the form of licenses. A coupled process is typically cooperation between two or more companies collaborating and sharing ideas.

You may have noticed that the two terms crowdsourcing and open innovation overlap. We chose the term “crowd innovation” to describe all activities triggered by a company in an outside-in process involving a crowd to solve a problem or find new creative ideas (see Table 2).

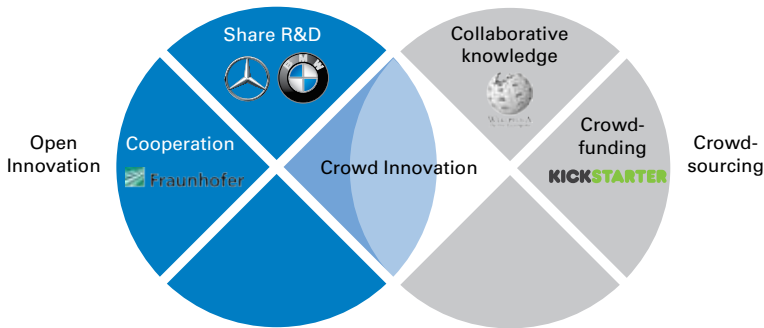


Table 2
Crowd innovation as intersection of open innovation and crowdsourcing

Source: Arthur D. Little analysis

2. Implementation approach for crowd innovation initiatives

In this section we will discuss the crowd innovation process at an abstract level, and consider some important principles that are relevant for each crowdsourcing permutation. As with many initiatives, the success rate of the various permutations for crowdsourcing depends on having well-defined goals and a clear process.

For open innovation, Slowinski designed a framework called the “Want, Find, Get, Manage” Model® (Slowinski, 2004). As crowd innovation can be characterized as the intersection of crowdsourcing and open innovation, we can refine the model for implementing crowd innovation initiatives into a process consisting of the five major process steps: define, prepare, execute, analyse and implement, as shown in Table 3.

These building blocks should be implemented in sequential order, as each process step builds on the one before it:

- a) During the **define phase** the organization decides if crowd innovation is the best option for creating ideas and solutions to a given problem. There are several ways to create innovative solutions that will foster business growth or optimization. Crowd innovation is only one possibility and may not be the right method

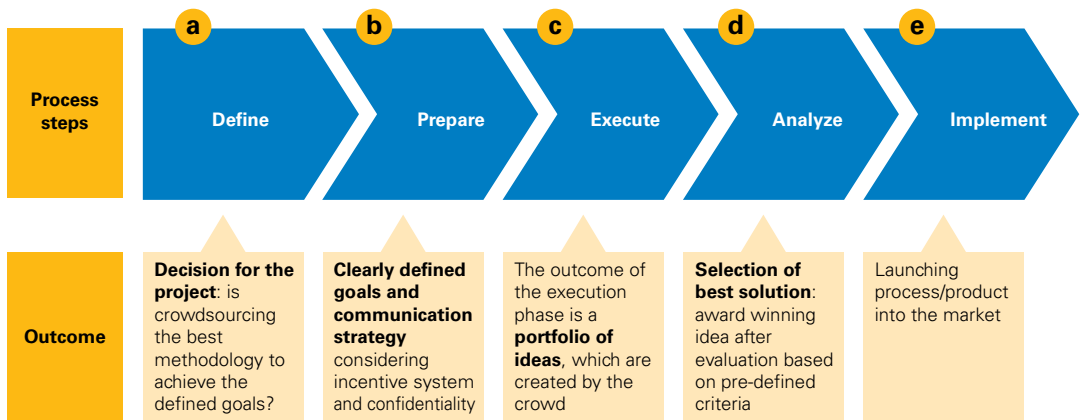


Table 3 Crowd innovation process overview

Source: Arthur D. Little analysis

for all situations. The more complex the problem, and the more internal knowledge required to understand it, the more likely it is that significant benefits will come from other methods of idea generation.

- b) The **preparation phase** outlines the goals, the communication strategy and the challenge to solve. The question posed to the crowd needs to be specific and clear, and information can be sanitized to avoid a threat to the business. An incentive system also needs to be specified to motivate the crowd. This phase will specify the exact target group for the crowd (expert versus broad population, etc.) and the platform on which to conduct crowd innovation. Another important outcome of this process step is a clearly defined list of criteria to evaluate the ideas in order to select the best fit.
- c) During the **execution phase** the challenge is communicated to the crowd and ideas can be created. Depending on the exact crowd innovation method and platform the dialogue could be moderated or the crowd could communicate without guidance. When ideas are openly discussed within the crowd, networking effects can further improve the ideas. As inventors know that

many other users will see their ideas, the inventor has extra motivation to produce something extraordinary. Finally, a review and communication process evaluates if the participants clearly understand the given task and if the solutions generated by the crowd address the stated problem.

- d) The ideas are then **analyzed** according to the criteria that have been defined during the preparation phase. The analysis can occur with either internal or external teams and be based on quantitative and qualitative evaluation criteria. The winner of the competition is announced and rewarded.
- e) During the **implementation phase** the innovation is launched to the market or the new solution is incorporated in the organization. Key questions to address during this phase are how to hand over the innovation from the crowd to the business and how to ensure a quick-time-to-market.

Table 4 shows an example of how these process steps have been applied in practice at BMW Motorbikes

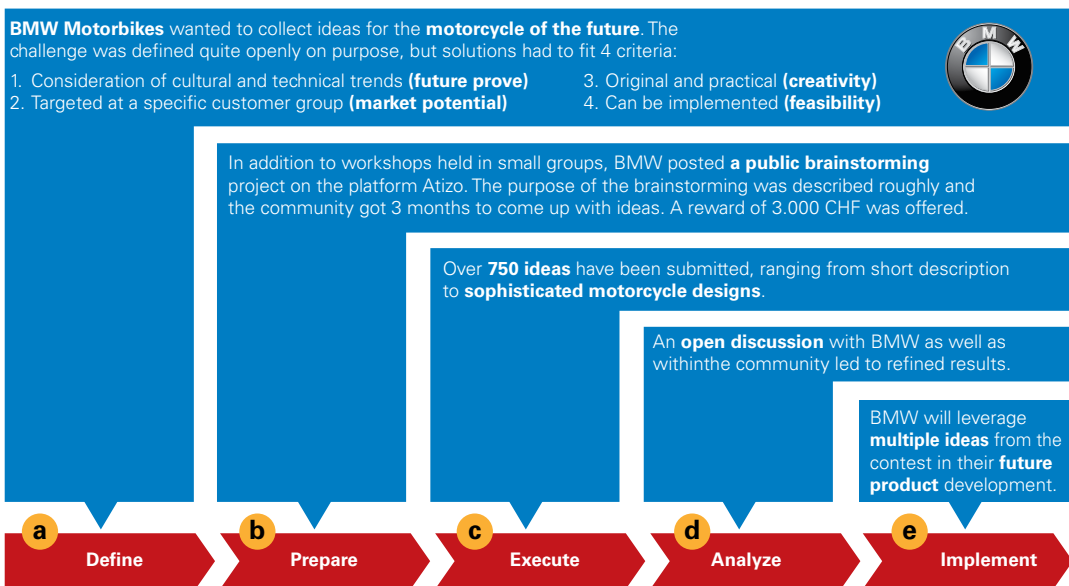


Table 4 **Example of a crowd innovation project at BMW Motorcycles using the Atizo platform** Source: Arthur D. Little analysis

3. Best practices for a successful crowd innovation initiative

Based on our research we have identified seven best practices for how to make crowd innovation successful for your business:

1. Start with a **strategic fit analysis** of whether crowd innovation fits into the overall strategy of the organization and if it will provide better results than traditional methods. The strategic fit analysis typically starts with the goals and roadmap of the organization for the upcoming years and a gap analysis to determine the missing capabilities. It is also important to evaluate the company's culture and processes when considering crowd innovation. Companies with a more open culture used to discussing new ideas are clearly more likely to accept and adopt crowd innovation ideas. According to expert Jordi Ràfols, Marketing Manager of Innoget, this is the most important factor. It has even been suggested that the prevailing culture of the country within which the company is operating can be significant.
2. Due to the wide range of specialized crowd innovation platforms and crowds ranging from technical experts to end consumers, **choosing the right partner** for executing the crowd innovation project is a key success factor. The CEO of PRESANS, Albert Meige, has developed a proactive approach with his team: a software algorithm called Ex-search that searches for a specific expert profile based on peer reviews such as citations in academic publications and collaborations in relevant projects. Through this method relevant experts can be identified.
3. **Precise communication to the crowd** is vital. Before communicating to the crowd it is essential to ask the right questions to clarify the goals and parameters of the project. A senior executive should act as a champion of the project and be engaged in the project from the initial strategic fit analysis to launching the new process or product within the organization.



Illustration by Sylvia Neuner

- 4. Protect intellectual property.** By using the right legal framework and crowd innovation method, companies can ensure that no confidential information leaks out of the organization and that the intellectual property of the end result belongs to the company. This can be achieved by carefully selecting which information to disclose. Though it is important to perform this step properly, its significance is often overemphasized by companies – our interviews with industry experts show that this risk can be mitigated well if the appropriate legal framework is applied. Sanjukt Saha, CEO of One Billion Minds, suggests a two-step process if a company is uncertain how much information it can disclose. Saha proposes that during the first round only generic information is disclosed to filter the innovators and once the right innovators are chosen, NDAs can be signed in order to disclose more information during the second step.

5. **How to choose a solution.** Filtering and selecting the best solution from a large portfolio of ideas is one of the biggest challenges of the crowd innovation process. Defining the problem accurately at the beginning of the problem is fundamental to finding the right solution. During the evaluation process it is important that the company works side-by-side with the crowdsourcing platform operator (if used) in the decision-making process.
6. **Implementing the solution.** Ideally, one employee sees the project through from beginning to end. The company itself should be prepared to implement the solution or idea. "Crowdsourcing is measured by things that actually have more to do with the corporate culture than with crowdsourcing itself," says Christian Hirsig, CEO of Atizo. Transparency within an organization is essential to successful implementation.
7. **Motivating the crowd** by monetary incentives is only one of many approaches. For many participants the prospect of being involved in working with a company they really care about is an important factor, according to Jordi Ràfols of Innoget. Another factor in motivating experts to engage in a given challenge is personalized communication. According to Albert Meige, CEO of PRESANS, when working with a smaller group of experts on a complex challenge it is critical to motivate the best-in-class experts, which can only be accomplished through personalized communication. Furthermore, people are motivated by social recognition and a sense that what they are doing is adding value, says Christian Hirsig of Atizo. For many innovators the main motivator is helping to solve an important problem. Emphasizing this point, Sanjket Saha of One Billion Minds detailed a crowdsourcing situation involving medicine in India. Medicine in India is often sold in individual strips without packaging. The details of the medication, including the side effects, are printed on the back of the strips, but once the pills are taken out of the strip the print on the back is no longer legible, causing risk for the user. "Working on a challenge such as this is a huge motivational factor for the crowd, as the solution will have a tremendous impact on the lives of many people," Saha explained.

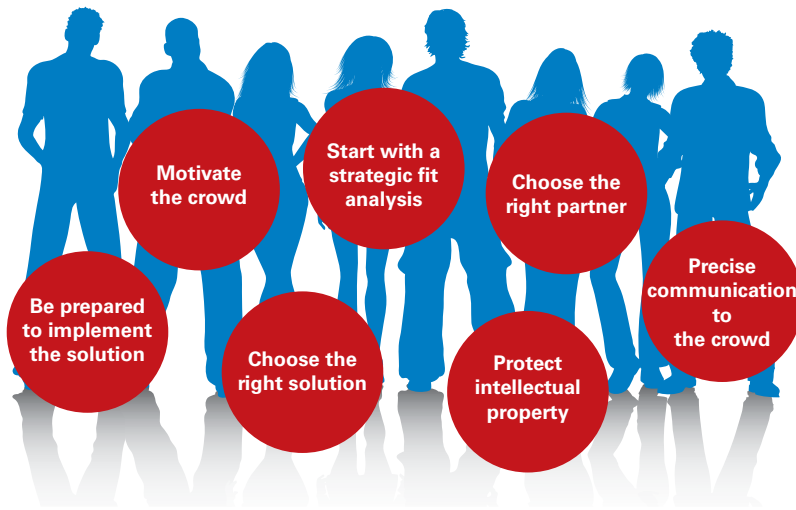


Table 5
Best practices for successful crowd innovation initiatives

Source: Arthur D. Little analysis

4. Insights for the Executive

In this article we have explored how crowd innovation can be successfully implemented to gather new ideas and solve challenges. Our research and in-house experience show that companies can benefit in six ways from properly-applied crowd innovation:

1. **Diverse ideas.** Crowd innovation provides a broader picture and a larger pipeline of new ideas compared to traditional R&D.
2. **Low set-up costs.** The initial implementation of crowd innovation can be lean and is able to be further expanded later.
3. **Multiplier effect.** A new idea, product or service introduced and discussed within the organization will often lead to generation of additional new ideas.
4. **Motivation and loyalty.** Customers, suppliers and employees can be engaged in the innovation process, leading to higher motivation and loyalty to the company and its products.

5. **Lowering R&D costs.** Crowd innovation as one part of the R&D portfolio is an efficient and cost-effective way to fill the innovation pipeline and to increase the productivity of R&D.
6. **Culture of innovation.** Over time the culture of an organization can be shifted towards a more open environment with major benefits for innovation performance.

Crowd innovation offers companies a way to create ideas and solutions to complex challenges, thereby fostering new business opportunities. Just as importantly, these ideas must be adopted into the company and successfully implemented in order to reap the benefits of crowd innovation. The implementation and best practices outlined here can serve as a guide for businesses that are considering crowd innovation. The right idea or solution is out there, and crowd innovation is a great way to find it.

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