Idea management systems for a changing innovation landscape

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Abstract: Over the last decades, the nature of innovation has changed from being primarily related to incremental product innovation towards more business model innovation, discontinuous innovation and open innovation. These changes impose new demands upon the ideation phase of the innovation process and on idea management systems. This article explores what an idea management system that handles some of these different forms of innovation ideas may look like. The studied idea management system differs from previous typologies in the sense that it is dual, i.e. aiming to generate, evaluate and select both continuous and discontinuous innovation ideas and employing different processes and criteria for this within the same system.

Keywords: dual idea management system, discontinuous, continuous innovation

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1 Introduction

Over the last decades, several changes have taken place in the field of innovation management. There is a growing interest in both how companies can survive discontinuous innovation (e.g. Christensen, 1997) and how they can proactively generate these discontinuities (e.g. Veryzer 1998). Moreover, firms are increasingly looking outside their boundaries in order to become more innovative (Chesbrough, 2003). A growing body of literature has also explored the area of business model innovation in detail (e.g. Charitou, 2001; Gilbert and Bower, 2002). Business model innovation is becoming increasingly important, both in order to appropriate returns from technological innovation and to increase the profitability in mature industries.

These changes impose new demands upon how firms manage their ideation activities. However, when looking at the literature about ideation and idea management systems, it can be seen that the above-mentioned changes in innovation are scarcely mirrored in the design and scope of these systems. Most of the literature concerning idea management systems views them as a way of coming up with continuous improvements or incremental product innovations. The nature of innovation has changed but the use of idea management systems does not seem to have shifted to the same extent.

This article explores what new characteristics are required in an idea management system in order to meet the changing nature of innovation. This is done by conducting an in-depth case study of a firm that has an idea management system and re-designed it in order to match its broadened innovation scope. The findings in this article indicate that idea management systems perhaps need to become more complex in order to handle different forms of innovation. The studied system differs from previous typologies in the sense that it is dual, i.e. aiming to search, develop and assess ideas in different ways depending upon their nature.

2 Theoretical exposition

Ideation can be regarded as the process of how individuals and companies generate creative ideas and develop them further (Graham and Bachmann, 2004). Idea management systems can be viewed as a structured support of the ideation phase. This theoretical exposition will first review how idea management systems have evolved over time and then some of the major changes in the innovation landscape will be outlined. Finally, those changes and their implications for the design and scope of idea management systems will be discussed.

2.1 The development of idea management systems

Historically, suggestion boxes have been used as a way to coordinate and manage creativity (Ekvall, 1971). In the 1990s idea management systems became an important element of the Continuous Improvement (CI) stream of management literature. In line with this, Fairbank and Williams (2002) view idea management as a way to increase CI capabilities. Several scholars have claimed that these systems can be used in order to come up with continuous improvements, for cutting costs and as a way to initiate cultural change (Schuring and Luijten, 2001; Verespej, 1993). Studying 22 idea management systems in small and large manufacturing companies, Carrier (1998) reached similar conclusions. He points out that those systems rarely lead to sweeping innovations: “they
were generally concerned with changes aimed at improving organizational efficiency and competitiveness, or with improving certain practices and procedures” (Carrier, 1998, p. 63).

Over time idea management systems have become increasingly sophisticated. This development has been enabled by the evolution of IT-tools which enable a systematic and efficient handling of ideas. As these systems have become more advanced the use of them has also been broadened. Idea management systems are today more useful not only for continuous improvements but also for coming up with new products (Cooper, 1993; Wheelwright and Clark, 1992; Day, Gold and Kuczmański, 1994). According to Verespej (1992), suggestion systems can be a lucrative source of innovation in organizations. Flynn et al. (2003) report on one example of such an idea management system which is designed to operate at the front end of the innovation process, aimed at gathering and documenting opportunity identifications. The outputs from the system are ideas which then proceed into the product development process of the company.

Some researchers still argue that idea management systems primarily deal with minor improvements. For instance, Proctor et al. (2004) point out that these systems can be used as a way to improve bottom-up communication. They further note that most suggestions concern minor things and that they consequently rarely have a major impact on the way the organization works. Though some researchers maintain this view, idea management systems are today often regarded as a management tool being used in order to give structure to the early phases of the innovation process (Boeddrich, 2004).

Gorski and Heinekamp (2002) developed a typology which summarizes much of the literature above about how suggestion boxes and idea management systems have been used (see Figure 1 below).

They describe the suggestion box and the Kaizen Teian systems, and note that these were primarily concerned with continuous improvements. Gorski and Heinekamp (2002) also provide an illustrative example of how an idea management system can work as a part of the fuzzy front end of the innovation process. The described system primarily aims to promote collaborative exchange of new product ideas, to collect ideas in one single repository and to facilitate quick generation of new product ideas. By extensive use of web technology, the system is highly interactive, and different ideas can be exchanged, refined and reused. The system has also enabled an increased participation in the ideation process. Creativity has become more decentralized and people who have not historically worked in the early phases of innovation are now participating to a larger extent.

In conclusion, previous literature has primarily viewed idea management systems as a structured process for generating, absorbing and evaluating incremental innovation ideas. Some researchers argue that these systems can be used as a structured approach to the fuzzy front end whereas others state that they are primarily related to continuous improvements.

2.2 The changing nature of innovation

The field of innovation management has changed over the last decades. Researchers are increasingly trying to understand how established firms can respond to and generate
discontinuous innovation. A discontinuous innovation can be defined as a major change, either technology- or business model-related (Veryzer, 1998). When technologies shift, new business models are introduced or new markets emerge, established firms can suddenly become vulnerable (Chesbrough, 2003). Over time, the field of discontinuous innovation has changed from primarily explaining incumbent failure (e.g. Tushman and Anderson, 1986) towards exploring how firms can proactively handle and generate it (e.g. Christensen and Raynor, 2002).

The area of business model innovation has also received more attention. The business model can be regarded as a construct which describes the value a firm offers to customers, the architecture of the firm, its network of partners, and its way of creating, marketing and delivering this value (Osterwalder and Pigneur, 2003). A growing body of literature has explored this area in detail (e.g. Charitou, 2001; Gilbert and Bower, 2002). Business model innovation is becoming increasingly important, both in order to appropriate returns from technological innovation and to increase the profitability in mature industries.

Another recent trend is that firms are increasingly drawing upon external resources in order to become more innovative (Chesbrough, 2003). Companies are re-thinking how they generate ideas and bring them to the market. Firms like Proctor & Gamble are bringing in more external ideas in order to leverage their internal R&D. One trend that is partly conflicting with the open innovation paradigm is the development towards intellectual capitalism (e.g. Granstrand, 2002). Productive assets and processes are becoming intellectual or non-material and this trend has to some extent called for an increased protection of those assets.

The broadened spectrum of innovation has implied that scholars are trying to understand how different forms of innovation can be managed within the same firm (e.g. Magnusson and Martini, 2008; Bessant, 2002; Tushman and O’Reilly, 2006). Interestingly, many scholars have underlined the importance of treating ideas differently depending upon the nature of the ideas (e.g. Bessant et al., 2005). For instance, former studies have concluded that discontinuous innovations need to be selected according to different criteria than incremental innovation (Rice et al., 1998). Employing standard evaluation procedures might even be counterproductive since discontinuous innovations are fundamentally different from incremental ones. There is an apparent risk that ideas which are discontinuous or business model-related are filtered away, not because they are bad but because they do not fit into the current business model and evaluation process. Chesbrough (2004) refers to these ideas as ‘false negatives’. Moreover, he concludes that companies need to alter their metrics of innovation in order to handle such initiatives. Summing up, the scope and perspectives on innovation have changed from primarily being concerned with incremental product innovation towards also looking at discontinuous innovation, business model innovation and open innovation. What new demands do these changes impose upon ideation activities and idea management systems?

3 Methods used

Given the exploratory nature of this paper, an in-depth single case study seems to be a suitable method. This method enables the detailed, descriptive information which is needed in order to understand the nature of this kind of idea management systems. The
case study below examines how the studied firm designed its idea management system in order to encourage both discontinuous and continuous innovation. Single case studies impose constraints upon the generalisability of the findings (Eisenhardt, 1989). However, as the work presented here is of an exploratory character, describing and seeking to understand the nature of this system and how it differs from previous descriptions of idea management systems, the method is deemed to be appropriate. Thus, the article does not attempt to provide an exhaustive definition of exactly what such a system may look like. Rather it aims to outline some of its key characteristics.

The firm was targeted since it has long experience of idea management and because it has changed its idea management system in order to handle different types of innovation. Hence, the chosen company offers an interesting opportunity for a detailed investigation of what an idea management system that handles different forms of innovation may look like.

The authors of this article maintain a formal research partnership with the studied firm and have been interacting with it continuously over the last years. This relationship enabled extensive access both to databases and to key employees. Both R&D managers and contributors to the idea management system were accessible for interviews. In addition to this, people who have been involved in the design and development of the system have been interviewed. In total, more than 30 interviews have been conducted, by the authors and by close colleagues. Some of this work was done within the scope of an innovation audit that was performed at the company. During the audit, interviews were conducted with top and middle management. The interviews were semi-structured, asking the respondents to describe how the idea management system works and how it differs from their previous system. All interviews were recorded, transcribed and listened to afterwards. Follow-up interviews were also performed in order to ensure an accurate interpretation of the gathered information. These data have been supplemented with statistics from the idea database. Here, all ideas within the company are stored and key information such as the assessment of the ideas can be found.

4 Results

The studied firm develops and manufactures consumer products and has long experience of doing so. It is currently present in 90 countries and has three different business areas. Since 1995, the firm has managed some parts of its ideation process by using an idea management system. This system started as a way to handle the increased flow of ideas that came into the patent department.

The purpose of the system was to capture, encourage, evaluate and select technological ideas for further investigation at the patent department (see Figure 2). It started within one business area and soon it expanded into handling all of the firm’s business areas. From the beginning, there has always been one person working fulltime managing the system. In addition to this, 10 persons from the different business units spend 10 percent of their time evaluating the submitted ideas. These people are highly experienced within R&D and product development. Many of them hold positions as senior researchers and are therefore regarded as competent when it comes to evaluating the technical feasibility of a new idea. This evaluation board is appointed by the R&D manager who also attends the evaluation meetings. When an idea is submitted, the most knowledgeable person is
assigned to make an assessment. Each week, the evaluation team gathers, and those who have assessed ideas share their thoughts with the others. Then the group jointly decides what grade the idea should get on a scale from 1 to 5. The evaluation criteria are set after the value the idea can bring to the case company, foremost in terms of novelty and usefulness:

1 point - The idea is well known and/or hard to implement
2 points - The idea is known and/or has minor advantages
3 points – The idea is new and useful
4 points – The idea is new and has a clear inventive step
5 points – the idea is new and excellent

After the idea has been graded, it is either stopped, brought into idea refinement or handed over to the patent department. The idea initiator gets an email within about 2 weeks informing about the progress of the idea but all ideas are rewarded with gifts or money depending on the grading. The system makes extensive use of the company’s intranet and everyone can submit ideas to it. It has grown steadily and today it also functions as an idea database. Thus, the system is also used in order to learn from earlier idea development, to reuse ideas in projects and also to inspire people in their daily work. When a new project starts, it is stated in the specifications that the idea database should be searched for ideas within the relevant area; R&D projects use the idea bank in the early phases of the project. In addition to this, employees can subscribe to new ideas within specific areas.

However, after a few years in operation, the people in charge of the system began to notice that although it successfully encouraged, stimulated and evaluated incremental technological ideas which led to patents, few discontinuous or business-related ideas were generated. Those which were submitted were rejected since they were not within the scope of the corporate strategy and the purpose of the idea management system. Having a background as a tool for handling patents, the system worked well for this purpose, but not for discontinuous technological or business ideas.

At the same time, a strategic shift in the company was taking place towards exploring new business areas. The firm started to move towards more business model innovation and discontinuous technological innovation. For instance, in 2002 the company launched a service organization in order to change the business model related to one of its major product innovations. Furthermore, it explored new technologies which are outside its core capabilities. Though the firm is still mainly focused on incremental product innovation, it has started to move into new areas. This strategic change had major implications for the ideation activities at the firm. Soon after this shift, the firm realized that its idea management system did not mirror the changed innovation scope. If a business idea was submitted it used to be rejected since the managers of the system did not have the competence or authority to evaluate business ideas. These ideas were then directed to the market organization, which was often too busy to develop such initiatives further. Moreover, the firm observed that the evaluation process tended to filter away discontinuous ideas. After the strategic shift, the company became increasingly aware of these problems and therefore decided to re-design the idea management system.
4.1 The new idea management system

The studied firm started to investigate how its system could be changed in order to handle different kinds of ideas. Previous experience suggested that different ideas needed to be evaluated and developed in different ways. Therefore the managers in charge of the system decided to make a distinction between “Inside the box” (ItB) and “Outside the box” (OtB) innovation ideas. “Inside the box” ideas were defined as incremental innovations with little market novelty and initiatives which are within the current competence area of the firm. Those ideas which are completely new for the firm, in either the technological or business dimension, were defined as “Outside the Box” initiatives. However, all idea submissions are still made using the same template, which is briefly described in Figure 3.

Hence, when an idea is submitted, it is first of all classified as either ItB or OtB and then it takes different paths depending upon its nature (see Figure 4). The classification is performed by the evaluation board and it is done by assessing the market and technology novelty of the idea in relation to the resources and capabilities of the company. For instance, if an established technology would be applied in order to develop products for a new customer segment, the idea would be classified as OtB. Conversely, a new process or product innovation which targets an established customer base would also be defined as OtB.

The ideas which are classified as technological and inside the box go to the patent department for further investigation whereas continuous “inside the box” business ideas go to the market organization. These ideas are treated like other project initiatives within the firm. Since this part of the system has been in place for a long time it works without any major problems.

The ideas which according to the above mentioned criteria are regarded as OtB take a different path. They go to a recently started unit called New Business Development (NBD) which lies outside the rest of the organization and aims to evaluate, incubate and develop those ideas. The board of NBD is comprised of senior managers from many parts of the company such as the sales organization, NBD, R&D and sales development. Here, ideas which were previously regarded as undesirable can be developed further. For instance, one idea that concerned a potential collaboration with an actor in the packaging industry was judged to be OtB since the company had no past experience of doing this. In the evaluation of the idea, the board wrote “this is an interesting idea…. This will be handled further in the New Business Development Group.” With the old system, this kind of ideas would not have been absorbed by the company, nor would they have been developed further.

4.1 The evaluation and development of outside the box ideas

At NBD, the evaluation process differs in many respects from the assessment of incremental innovations. The process is less rigid here; rather than primarily evaluating ideas according to novelty and usefulness, the screening makes detailed assessments of the idea and in what ways it is OtB, what potential it has etc.
Figure 5 gives an illustration of the different steps in the NBD evaluation and development. First, a coarse ItB/OtB assessment is performed by the person who is in charge of managing the system. Then a more detailed analysis of the idea’s nature is performed. If an idea is judged to be compatible with all existing capabilities it goes to the market organization (Cat). Those ideas which are deemed to be OtB are in the next step evaluated according to other criteria. There are three dimensions of the OtB evaluation: Risk, Effort and Benefit. Risk is comprised of market and technology risk, whereas the Effort dimension concerns difficulties related to the brand, the organization, customer insight and technological knowledge. The Benefit aspect deals with the potential market, possible learning and uniqueness. On all these different aspects, the idea is graded on a 1-5 scale. In the first step, the Effort assessment is made (the fine tuned assessment in the figure above) and in the next phase, the Risk and Benefit evaluations are made. These steps are performed by the board of the NBD group. By making the evaluation in two steps, the company believes that the risk of filtering out good ideas is reduced.

Moreover, the firm aims to be less strict here on profit calculations and growth prospects since past experience suggests that this may hamper OtB innovation. “Big companies think big and therefore miss out on many initially small opportunities, therefore we try to avoid early calculations of profits and market size”, says the innovation manager at the company. If the business benefits are deemed to be larger than the risk and effort, the idea moves further into the Business Plan Development phase and later on to Concept Development. If the idea becomes an interesting concept it is in the next phase handed over to the market organization or launched as an independent venture. Though this process is more open-ended and iterative than the former one, the company has so far not managed to make it truly iterative, though they intend to do so. Since the NBD unit is still relatively small and has been started recently, it is hard to evaluate its performance at this point. So far, two major ideas have been developed further. The reason why these ideas have been nurtured in the NBD unit is that they were outside the current scope of the core business.

Several interviewees have underlined the importance of concept development and an extended fuzzy front end. The R&D manager says that the company should have a more experimental approach to innovation. The NBD initiative and the new evaluation process are regarded as major steps in this direction.

The new system was launched in May 2006. However, the firm started to receive business and OtB ideas already in December 2005 (see Figure 6). Figure 6 below contains data about the submissions of different forms of ideas from September 2005 until August 2007. It can be seen here that the percentage of OtB ideas (business ideas and technological ideas) has on average increased over time.

The system has only been in operation for a few years and therefore it is too early to say now whether it will lead to any breakthrough innovations since this usually takes more time. The studied firm has encountered some problems in this shift. For instance, though improvements have been made since the launch of NBD, the company has still had difficulties finding time and resources in order to evaluate OtB ideas properly. Moreover,
the firm did not initially have a landing ground for discontinuous ideas. Since the previous idea management system aimed to generate patents, there was always an obvious receiver of the ideas, namely the patent department. The NBD unit is intended to work as a landing ground for these ideas. The managers in charge of the system recall that it took a while before the first system that was launched in 1995 worked properly and thus they expect the new system to be improved over time. However, other interviewees are more skeptical and think that the company may in fact be too focused on the system and that so much structure may hamper its innovation capabilities. Others claim that this new approach gives OtB ideas a new chance and that the system is of much symbolic value since it encourages employees to submit ideas which used to be undesired. Thus, the new idea management system can help to nurture a new culture, where OtB ideas are welcomed. An additional benefit is that OtB ideas are stored in the company’s idea database and can be found and used later.

5 Analysis

It can be seen in the case study above that the nature of innovation at the studied firm has changed significantly. The company went from having primarily focused on cost-cutting and incremental innovation towards more discontinuous and business model innovation. Though the firm is still very product- and patent-oriented in its innovation activities, the strategic shift still implied that the idea management system had to be re-designed in order to match the changing scope of innovation.

As can be seen from the description of how the firm’s idea management system used to work, it is clear that most of its features have been described by previous literature regarding idea management systems. The purpose of the system was to generate and encourage continuous improvements as well as new products or ideas for innovation (Boeddrich, 2004; Cooper, 1993; Wheelwright and Clark, 1992). The extensive use of IT enabled it to be highly interactive – ideas could be refined, exchanged and re-used in different projects. An additional advantage was that all ideas could be stored at one single repository within the firm. Hence, the previous system had many similarities with the one that Gorski and Heinekamp (2002) used as an illustrative example.

Having a background as a tool for handling patents, the idea management system worked well for this purpose, but not for ideas which were technologically discontinuous or business-related. The fact that ideas which were not intended to result in patents used to be filtered out illustrates some of the shortcomings of the previous idea management system. In line with Chesbrough (2004) some of these ideas were probably “false negatives”, i.e. initiatives which for some reason were not developed further despite having a great potential.

In order to cope with the increased variety of ideas, the firm made several changes of its system. The new system does not fit into any of the descriptions in the typology by Gorski and Heinekamp (2002). First of all, it differs in the sense that innovation ideas follow different paths depending upon their nature and scope (see Figure 4). It can be seen in the case study above that a distinction is made between different forms of ideas.

Secondly, the evaluation and development process is different depending upon the nature of the idea. ItB technological ideas are primarily evaluated in terms of their degree of novelty and usefulness. The initial assessment of OtB ideas rather focuses on
understanding their nature, and in what aspects they are discontinuous. Then the actual evaluation is done by using the Risk, Benefit and Effort dimensions. Interestingly, some aspects of those dimensions are not related to direct financial results. For instance, learning and uniqueness are factors which are hard to measure and evaluate from a profitability perspective but are still used as evaluation criteria. Moreover, the evaluation is made in steps, the Risk and Benefit aspects are dealt with after the Effort assessment has been made. By making a step-wise assessment, the company believes that the risk of ending up with “false negatives” is reduced.

Thirdly, the ideas are received by different units. Discontinuous technological ideas and business ideas go to the New Business Development group, which aims to develop and commercialize ideas that are adjacent to the core activities of the firm, whereas incremental technological ideas are handed over to the patent department.

These three observations indicate that the system in fact has a dual structure. Having a dual system is in line with many of the managerial prescriptions from the literature about discontinuous innovation, which underlines the importance of treating it in a different way than continuous innovation initiatives (e.g. Rice et al., 1998; Magnusson and Martini, 2008; Tushman and O’Reilly, 2006). Using a dual idea management system seemed in the case study above to be an attempt to overcome the dilemma of false negatives. The fact that these ideas used to be filtered away and that the firm started to receive business ideas even before the official launch of the new system can be regarded as a confirmation of this.

Summing up, the case study above has described an idea management system which does not seem to fit into previous typologies in the literature. Historically, idea management systems have been used as either a tool for continuous improvement and incremental innovation or as a structured approach to the early phases of new product development. The system described above differs from previous typologies in the sense that it has a dual structure, i.e. ideas are evaluated and developed in different ways depending upon their nature. Since these properties have not been covered by previous literature, this calls for an extension of existing typologies of idea management systems. We propose that this new category of idea management systems ought to be referred to as Dual Idea Management Systems since the submitted ideas are evaluated and take different paths depending upon their nature.

6 Discussion

As was noted above, having a dual idea management system is in many respects in line with the managerial practices related to discontinuous innovation. Moreover, the design of such a system is consistent with Ashby’s law of requisite variety (1969), which states that the larger the variety of actions available to a control system, the larger the variety of perturbations it will be able to compensate. A larger diversity of ideas seems to imply that the system which handles these ideas also needs to become more complex.

However, developing discontinuous innovations is an inherently uncertain and complex process and having a structured approach to this may therefore not be the right way forward. After all, many firms want to employ strict financial criteria to the evaluation of
innovation ideas. Having a highly structured, albeit dual, approach to ideation may result in the very opposite of what was originally intended.

Moreover, the literature on discontinuous innovation has underlined the importance of informal networks and having “champions” in a project (Veryzer, 1998) in order to succeed. Skunk work and other forms of loosely organized innovative activities have often turned out to be critical for the development of discontinuous innovations. Thus, the success factors related to discontinuous innovation may often be related to other things than having a highly structured idea management system and therefore firms should not expect that such a system will necessarily lead to a much greater innovation capability.

Summing up, this article does not argue that having a dual idea management system is necessarily the optimal way of handling the early phases of the innovation process. Rather, it has pointed out that the changing nature of innovation has imposed new demands upon ideation and that idea management systems need to be changed in order to meet this demand. The studied firm has realized that it needs to treat different forms of ideas in different ways and that all ideas cannot go through the same funnel. The idea management system which is described in this paper offers an illustrative example of how such a system can be designed in order to meet some of the new demands on ideation.

7 Conclusion

This article has explored the characteristics of idea management systems that aim to meet some of the new demands upon ideation that follow from the changing nature of innovation. The findings suggest that previous literature on idea management systems has not covered this aspect and that past typologies ought to be extended into also incorporating dual idea management systems. The studied system is dual in the sense that it deals with both continuous and discontinuous innovation, and does so by making a distinction between them and then treating the ideas differently by employing different processes and evaluation criteria. Having a dual approach is in line with much of the recent literature on discontinuous innovation which underlines the importance of treating discontinuous and continuous ideas differently.

However, it is still not obvious that such an approach to ideation is preferable; it may lead to excessive structure and bureaucratization. As was noted in the discussion part above, it is unclear how well such dual systems actually perform. Hence, more research needs to be undertaken concerning dual idea management systems and how well they work. Furthermore, there is an ongoing shift in idea management from workflow driven approaches towards community driven evaluation. Since the firm studied has not undergone such a shift, this aspect could not be assessed here. It would be interesting for future research to investigate how these different approaches affect what the degree of innovation ideas that is generated.
8 References


Figures

<table>
<thead>
<tr>
<th>Type of idea management system</th>
<th>Main characteristics and scope</th>
</tr>
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<tbody>
<tr>
<td>Suggestion Box</td>
<td>Can be anonymous, usually a broad scope</td>
</tr>
<tr>
<td>Kaizen-Teian systems</td>
<td>Incremental innovation and continuous improvements</td>
</tr>
<tr>
<td>Employee-driven idea systems</td>
<td>Quality and continuous improvement</td>
</tr>
<tr>
<td>Web-based idea collaboration programs</td>
<td>More interactive</td>
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*Figure 1: A typology of idea management systems (Gorski and Heinekamp, 2002).*

<table>
<thead>
<tr>
<th>Dimensions of the idea submission template</th>
<th>A brief description of each dimension</th>
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<tbody>
<tr>
<td>Problem/Opportunity</td>
<td>What customer need the idea addresses.</td>
</tr>
<tr>
<td>Idea</td>
<td>Key elements from the ingredients, the manufacturing process, the packaging, the marketing, or the sales set-up.</td>
</tr>
<tr>
<td>Consumer benefits</td>
<td>A clear and single-minded description of the most important benefits for the consumer, in order of priority.</td>
</tr>
<tr>
<td>Company benefits</td>
<td>A description of benefits for the company if the idea was implemented. What would give us an advantage on the market?</td>
</tr>
<tr>
<td>Possible disadvantages</td>
<td>What are the main drawbacks of this idea?</td>
</tr>
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*Figure 2: The studied firm’s idea management system in 1995.*

*Figure 3: The idea submission template used at the case company.*
Figure 4: The new idea management system that the studied firm launched in 2006.

Figure 5: The development process for business ideas and discontinuous ideas. It starts with an ItB/OtB assessment and then takes different paths depending upon the nature of the idea.
Figure 6: The percentage of ideas that are related to technology, business and Out of the box submitted to the idea management system each quarter from September 2004 until August 2007. The light gray color represents all OtB ideas, i.e. both technology and business related ideas.