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WHAT HAPPENS TO REJECTED IDEAS? – EXPLORING THE LIFE OF IDEAS FOLLOWING THE COMPLETION OF PROJECTS

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ABSTRACT
In an ongoing development project there is a risk that promising ideas are rejected due to time constraints. Given that ideas are the carriers of innovation, and that novel and radical ideas are, to a greater extent, exposed to rejections and resistance than more conservative, those ideas, previously rejected from projects, could be seen as a potential goldmine of innovations. The aim of this paper is to explore the 'life' of rejected ideas following the completion of design projects. An exploratory approach was chosen in order to gather information about companies' ways of working with rejected ideas. Respondents from seven companies were interviewed, and two main routes for managing rejected ideas became apparent: codification and personalisation. All participating companies had some sort of codification approach, but this was always complemented by a personalisation approach, whether implicit or explicitly stated. This is important as an idea management system is unable to fully carry an idea forward as it lacks intent, insight, and argumentation. Furthermore, responsibility for rejected ideas and maturity of ideas both seem to affect the processing of rejected ideas.

Keywords: rejected ideas, idea management, innovation

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1 INTRODUCTION

Ideas and concepts may be seen as the carriers of innovation (Hansen and Andreasen, 2005), and it is now a well-established fact that innovation is key to any company's development and competitiveness (Legardeur *et al*., 2010). This implies that, in order to be successful in the market, organisations must have a steady stream of ideas entering their product development process (Nilsson *et al*., 2002). In addition, idea generation is also an important part of the concept development phase once a design project has begun. The aim, in the early stages of product development, is to create a wide set of alternatives. In the engineering design research community much effort has been spent on improving ideation, concept development and concept evaluation. In the concept development phases, many ideas are rejected or discarded even though they may have potential, but there has been little research which has focused on what happens to these rejected ideas.

In order for ideas to have an impact they have to gain entry into the regular development process (Backman *et al*., 2007). According to Leifer *et al*. (2000), radical ideas, *i.e.* ideas that have the potential to create an entirely new set of performance features, improvements in known performance features or a significant reduction in cost, can come from many directions. Because the sources of radical ideas are so diverse, noticing them is difficult and many are missed for lack of an alert listener (Leifer *et al*., 2000). Moreover, novel ideas are often rejected due to a 'rational' decision, since the idea in question does not fit the current frame of reference of the company or of the specific project. This means that the reasons for rejection are both clear and consistent with the rules and criteria associated with the existing frame of reference, whereas the novel idea would require a, so called, 'reframing' in order to be implemented (Bessant *et al*., 2010). In a study of a project at Volvo Cars, which aimed to develop innovation capabilities, another reason for rejecting ideas was identified (Börjesson and Elmquist, 2011). There was awareness within the company that some novel ideas would be perceived as threatening to the organisation. To avoid creating resistance against new ideas it was, therefore, important to introduce the idea gradually. In an ongoing development project there might not be enough time to reframe the project or introduce the idea gradually. Instead, there is a risk that more radical ideas will, in fact, be rejected. In order to prevent that these ideas get lost in the process—and with them opportunities for the company to innovate—it is important for a company to process ideas which have been rejected from projects. Hence, the aim of this paper is to explore the life of rejected ideas following the completion of projects. The following research question has guided the study: *What happens to ideas that have been rejected from a product development project?*

In this paper we define the rejected ideas as ideas that are not incorporated into the final product of the product development project. The method applied to explore this area was a literature study as well as the analysis of interviews with representatives active in the innovation activities of seven large companies. In this paper an idea is defined as a concrete suggestion which is believed will make a difference, in comparison to viewing an idea as a mental construct (Hansen and Andreasen, 2005) or a proposal for action (Brem and Voigt, 2009). No distinction is made between different types of idea, i.e. whether they answer a why, what or how question. In addition, the study is limited to ideas that come from or have been dealt with as part of projects.

2 RELATED WORKS

This section is structured as follows. First, we investigate the terms 'concept' and 'idea' that sometimes appear to be used interchangeably (Hansen and Andreasen, 2005) and thus require clarification. Secondly, idea rejection and idea resurrection or 'unshelving' are introduced in order to provide a background for the empirical results which follow. Finally, the capturing of a design rationale for ideas is discussed.

2.1 The terms 'concept' and 'idea'

According to Hansen and Andreasen (2003), the engineering approach to a 'design concept' focuses on the technical side, *i.e*. the emphasis is on creating a principal solution that realises a required functionality. An example of this reasoning is found in Kroll and Shihmanter (2011), in which a concept is described as the idea to be realised for some functional reason. Furthermore, a concept can either determine principal solutions or partial solutions (Hansen and Andreasen, 2005).

For an idea to be conceptual it is necessary for the design team to relate the idea to its context and identify the characteristics that indicate the difference that matters in the product-context relationship

(Hansen and Andreasen, 2003). In the automotive industry, where Backman *et al.* (2007) conducted a study of concept work, the meaning of 'concept' is generally considered slightly different from the pure meaning of 'idea'. In most cases the concept is considered to be a development concept that is "a set of proposed solutions complying with a set of fixed constraints" (Backman *et al*., 2007, pp. 20).
An idea (or product idea) is, according to Hansen and Andreasen (2005), a mental construct articulating both a design and the project for achieving that design. An idea can also be seen as a proposal for action, which either reacts to recent developments or proactively utilises them (Brem and Voigt, 2009). Therefore, ideas are strongly shaped by the organisational context and are always embedded in local circumstances; an idea never emerges in isolation (Bakker, *et al*., 2006). The ideation process, *i.e.* the process for generating ideas has, according to Hansen and Andreasen (2006), at least two aspects: that which the idea concerns (content) and somebody that carries the idea forward (having intent, insight, argumentation *etc*.). Hence, it is possible to distinguish between different types of idea based on their content (*e.g.* an idea that improves the process). Another possible categorisation is to distinguish between ideas based on what type of question they attempt to answer. Nilsson *et al*. (2002) and Langrish (2004) make a distinction between needs (why to do something), ideas of what to do and ideas of how to do something.

2.2 Rejecting ideas

According to Bakker *et al.* (2006) ideas can be rejected for reasons relating either to the *content* (*i.e.* an idea is impracticable for technical reasons) or the organisational *context* (*e.g.* budget problems, priority of other ideas, organisational policy, competition). In an experimental study focusing on effectiveness and differences in the creative design process, Vidal *et al*. (2004) take the viewpoint that rejected ideas are ideas that "are related to the requirements of the problem, but do not constitute a viable solution or do not meet the requirements", *i.e.* ideas that are not valid (Vidal *et al.*, 2004, pp. 291). In reality, however, ideas can be rejected for reasons other than validity. It may be that the timing is wrong, that the idea is not sufficiently developed and needs more work, that resources are not available or that the idea does not mesh with current priorities. Other possible reasons for rejecting ideas are that they originate from different sources and also have different stages of maturity (Nilsson *et al.* 2002) or that the idea does not fit into the existing frame of reference at the company in question (Bessant *et al*., 2010).
According to a number of authors (*e.g.* Cooper, 1993; Nilsson *et al*., 2002; Alam, 2003; Bakker *et al.*, 2006), rejected ideas should not be discarded entirely, instead they should be stored in an 'idea bank'. The reason for this is that the ideas should be kept aside for future consideration, since changes in the context (*i.e.* market or technological changes, increase in the technical budget or a change in company strategy) can change the disposition of previously rejected ideas (Alam, 2003).

2.3 Resurrecting or unshelving ideas

Still, the danger of these 'idea banks' or 'idea pools' should be recognised. According to Schepers *et al.* (1999) it is essential to have an innovation process that guarantees the regular inspection and reassessment of banked ideas, otherwise "idea pools become idea graves and good ideas will never get a chance to be implemented". The underlying reason for this is that the responsibility for an idea is transferred to a system and does not remain with the author (Schepers *et al*., 1999, pp. 30). In their study focusing on project 'unshelving', that is, the resurrection of a previously abandoned project, Wilson and Hlavacek (1984) found that successful unshelving was more common in industries where the window of opportunity was not too short, *e.g.* chemical products, pulp and paper. The study highlighted the importance of individuals, and noted that some individuals even remained active in exploring the ideas despite the project having been paused for several years and having no formal budget. These individuals recognised that conditions had changed to a more favourable position and that they could influence the resurrection of the idea. Even though individuals are important, "A system that only depends upon memory and individual initiative will produce far fewer successful unshelvings than a system that conducts formal, periodic reviews*."* (Wilson and Hlavacek, 1984, p. 33).

2.4 Documenting the design rationale for ideas

While some of the design rationale (*i.e*. motives and arguments why something is designed in a certain way) for the different design solutions in an engineering design process might be stored in a Product

Data Management (PDM) database or in a geometric model (*i.e.* where the relationships between different parameters can be defined), the rationale describing *why* these particular relationships were defined – *the design intent* – is, however, typically not stored. In fact, much of the knowledge created and shared in projects is often inadequately documented. Even when documentation does exist, it is often fragmented and de-contextualised, making it less useful to those not working within the particular project. Furthermore, the documentation is normally skewed towards successful ideas and concepts (*i.e.* those that are part of the final product). Törlind and Larsson (2006) analysed early design sessions and found that documentation was limited to sketches from these sessions, making it difficult for someone who did not participate to understand the context and reasons for the rejection of some of the concepts. An exception is when an idea is deemed interesting enough to patent, but the patent was never subsequently used in a final product. These unused patents provide a good starting point from which to resurrect ideas (Wilson and Hlavacek, 1984)

Several tools and methods have been developed to mitigate this problem and attempt to capture the rationale of the designers. Recent work includes DRed (Bracewell *et al*., 2008) and concept-configuration-evaluation triplets (Kroll and Shihmanter, 2011). Thus, how rejected ideas can be stored in idea banks (*e.g.* Cooper, 1993), how they can be unshelved (Wilson and Hlavacek, 1984) and how the reasons for rejection can be captured (*e.g.* Bracewell *et al*., 2008) have been studied. However, little has been written about the actual fate of the rejected ideas.

3 METHOD

An exploratory approach was chosen in order to gather information about companies' ways of working with rejected ideas. Given the exploratory nature of the study, there was an explicit focus on including companies from various sectors in order to prevent bias towards any specific sector. This study is based on a total of seven semi-structured interviews with respondents from seven companies from different industrial sectors. An overview of the participating companies is found in Table 1.

Table 1: Description of the companies and respondents participating in the study

	Company
A	A Swedish company developing and selling heat exchangers. The respondent is a manager for concept development and is also responsible for ideation within the company.
B	A German automotive company in which idea management is a part of the continuous improvement program. The respondent is responsible for idea management for the entire group.
C	This is an internal consultancy within a large company, located in the Netherlands, developing consumer electronics. The respondent was an internal consultant within innovation management.
D	One of the business areas of a larger Swedish organisation that develops hygienic products. The respondent is responsible for ideation within the business area.
E	A Swedish forestry company in which the respondent functions as the link between R&D and the markets and is also closely connected to the company's innovation activities.
F	A large Swedish automotive company in which the respondent is one of two full-time employees within the area of innovation.
G	This company is a wholly-owned subsidiary, offering IT solutions, within a larger group offering commercial transportation solutions. The respondent is responsible for the technology watch and business innovation department.

The semi-structured interview form was chosen in order to allow a greater breadth than other types of interview (Fontana and Frey, 2000). Semi-structured interviews allow the respondent to elaborate on the topic of the interview and the interviewer to follow up on leads provided by the respondent. Follow-up questions were open and built upon the words used by the respondents in order for the terminology used to be 'natural' for the respondent. All interviews were conducted with the support of a standard list of open-ended questions. Examples of questions used are: *How do you define innovation? Idea? Tell me about your initiatives to foster innovation?* and *How are rejected ideas, that is to say, ideas developed in the project, but not included in the final product, managed?* All interviews were performed over the phone in either Swedish or English, recorded and transcribed. The length of interviews ranged between 44 and 82 minutes, with an average of 67 minutes.

3.1 Data analysis

The interviews were analysed after transcription. After reading the texts, open coding was used to create labels with names that reflect the meaning of the associated text (Kwortnik, 2003). Representative quotes were highlighted in the transcripts and a spreadsheet was used to compile these quotes and record from which interview they originated, as well as temporary coding labels (that resembled or copied the words used by the respondents). In order to bring in the context of the question, an effort was made not to extract quotes that were too narrow, *i.e.* to keep some contextual information in the quotes. Clustering of the coding labels was conducted, with the support of the compiled spreadsheet, in a second phase. This clustering created a common list of labels to incorporate the meaning of several respondents' quotes (Miles and Huberman, 1994). This was followed by an iterative process of back-and-forth analysis in which new data were compared to the categories in use, and new categories were compared to previously coded data (similar to the comparative analysis by Kowortnik (2003)). From this process a number of central categories emerged that provide the basis for the results presented in section 4. To prevent bias, the results of the analysis were discussed by several researchers.

4 RESULTS

In the following section, the discussion of the results is divided into four sub-sections. First, we consider the respondents' view of the term 'idea', since this is important contextual information for the reader. Secondly, idea management in the companies is addressed, with specific reference to how rejected ideas are managed. Finally, we examine how and when ideas are documented in the companies, and also the importance of idea responsibility with regard to rejected ideas. Company affiliations are provided in brackets after all included quotes.

4.1 The respondents view of the term 'idea'

Remarkably few of the participating companies had a clear definition of the term 'idea'. This is noteworthy since all companies had a view of what innovation was and almost half (3 out of 7) of these definitions included the term 'idea'. This finding might be better explained by a quote from one of the respondents: *"We have never thought about defining that* [an idea], *more than that it is any suggestion that can change something"* (A). However, at one of the companies a clear definition of an idea existed and was connected to their definition of innovation. In this company, innovation was seen as the creation of a new standard, whereas an idea improved an already existing standard, as explained by the respondent: *"Ideas, for example, have a standard. And over the changing process the content will get a new standard, a better one"* (B). All companies have their way of working with ideas, but the methods and processes differ. When it comes to idea management, the majority (5 out of 7) of the participating companies had a system for managing ideas.

4.2 Idea management in the participating companies

In at least one of the companies there was the possibility to park an idea that was considered promising, but not yet ready (for various reasons) for implementation. It is possible to return to these promising ideas later and evaluate whether circumstances have changed and implementation is now feasible. This process is an attempt to give promising ideas a second chance before a decision is made. At this company it was possible to park an idea as many times as you want, for a period of three years.
A respondent from another company identified the difficulty of knowing what to do with an idea in the case of the idea not being directly connected to the idea owners' current work. The respondent highlighted the need for a process within this area: *"If they have an idea, what should they do then? Because that isn't crystal clear today.* […] *they don't really know where to go, especially if the idea isn't directly connected to their work but to something else. Then they have to spend a lot of time selling in this idea somewhere where it doesn't belong, and that time they don't really have. Therefore, it is important that at process for capturing these things exist"* (G). There is a risk that if this type of idea is presented to the line manager, it will be rejected despite potentially being a promising idea for another part of the organisation. In one of the companies there was a specific person responsible for distributing all incoming ideas to the managers who might have interest in it. Despite being a tedious process, this has the potential to distribute ideas to the right part of an organisation.

4.3 Managing rejected ideas

Regarding the management of rejected ideas, two approaches appeared to exist within the studied companies: 'codification' and 'personalisation'. The codification approach involves a systematic approach where ideas are codified and stored in documents or databases for easy retrieval and reuse. However, this does not prevent companies from also using a personalisation approach where the ideas are 'stored' and communicated through people.

The codification approach makes the ideas visible and searchable within the organisation, *e.g.* at the beginning of a new product development project it is possible to retrieve old unexplored or dismissed ideas from similar projects. These ideas can be used as inspiration or as a foundation for further exploration. It was highlighted by one of the respondents that if no one feels responsible for the ideas stored in the system, they will not be looked up retrospectively. A similar experience was also shared by a respondent from another company: *"The ideas are captured.* […] *And then what do you do with all the captured ideas. I think the honest answer is nothing"* (G). The same respondent reflected upon what happens to ideas which have been rejected from projects: *"I mean, if you really give it a thought, then you say, well, you have a lot of ideas generated. But you're only going to pursue a few of them. If you really start collecting all the ideas generated, you will have information overflow because then there's no way how to handle all the ideas, I would say. Because the numbers, it keeps on increasing, increasing, increasing"* (G). Concerns about information overflow are also related to how far the idea has been developed. If the idea has been thoroughly investigated, tested and elaborated, a report will usually exist, but if an idea is more immature and has been dismissed at an early stage, a lot less will have been documented.

Another approach to resurrecting or unshelving ideas is to rely on individuals to take ownership of them, *i.e.* the personalisation approach. A number of respondents stated that ideas which have promise are carried forward by the people participating in a workshop or project, and the following example was given:*"There is no systematic way that we, let's say, in the sense that you could say we collect those ideas and we put them into the next round of ideation. What you typically see is that the ideas, they more or less - the transfer from one round of ideation to the next one is via the people involved"* (C). This excerpt provides an example of an implicit personalisation approach (*i.e.* it is up to the individual to carry the ideas forward). Other respondents provided examples of more explicit forms of personalisation (*i.e.* where the individual is supported by, for example, organisational or working practices). One of the companies had established a separate part of the organisation to handle those ideas which are more radical, but also ideas that are not carried forward by other parts of the organisation: *"Then it is possible to come to us and say, 'I have this idea, can you look at it and see if it is interesting for the company because I cannot get it through?' And then we do that.* [...] *In some cases we have taken it into our cross-functional process, looked at it, evaluated it and in several cases pushed it further in another way.* [...] *It can be good to have a small conflict here you see"* (F).

By creating an organisation where these types of ideas can attract attention and resources, a conflict can be created within the company. This conflict can be a little intimidating to some, and in some instances there have been reactions such as *"why are you dragging this up when we have decided to…"* (F). By having an organisation which deals with radical ideas an incentive is provided for managers to reflect a little more on the potential consequences before rejecting an idea; nobody wants to be a bottleneck for innovation. Another example of an explicit personalisation approach was the use of innovation coaches working scattered throughout the organisation: *"No, I don't think that we have anything formalised around that* [rejected ideas from projects]*… it should be a part of the innovation coach assignment* [current initiative] *that is about taking care of ideas where ever they come from.* [these innovation coaches] *will spread the word how to take care of an idea, how to proceed"* (G). A final example of an explicit personalisation approach was found by one of the companies participating in this study. The company held idea generation workshops at the end of each project, taking the time to collect and discuss ideas: *"We find it terribly interesting to end a project with an idea generation. Then it is more about reviewing what has happened but also go through recommendations for how to proceed. What is the next step? Then these things that have been missed or that couldn't be dealt with because of different limitations arise again"* (A). The underlying thought is that the individuals present at the workshop will carry forward these ideas and proposals for improvement into the next project. This type of workshop also results in the documentation of lessons learned, as well as suggestions about how to proceed with future projects in the same area.

4.4 Documentation of ideas

When it comes to documenting ideas, the companies described various working practices. One of the respondents described how the company uses templates to document ideas generated early on in a project, *e.g.* during an ideation session. On these templates the names of the subgroups that have been working together with the idea are always recorded, which makes it possible to backtrack to where the original idea came from at a later date. There were also attempts to document a lot during the process so that, if there is a change in circumstances, it should be easy to start again, this time with the experience from the first iteration.

As previously mentioned there were also attempts at documentation following the completion of a project. This type of documentation consists of new concepts with connected analyses of their strengths, weaknesses, opportunities and threats (SWOT analysis): *"We let them design new concepts, maybe in three groups. They are to write down how they visualise the next thing and they are told that they should present the result as if they were standing in front of top-management and were asking for money for this particular project* [...] *Then we get both a presentation and also a SWOT analysis since the other two groups listen to the presentation. One group analyses opportunities and strengths whilst the other group focuses on threats and weaknesses. The outcome is three new concepts with an attached SWOT that we attach to the material"* (A).

Companies that use a system for documenting ideas, have the documentation tailored to their specific needs. The documentation typically includes, at the very least, the problem (what is the current situation and what is wrong with this?) and the suggested solution. In some cases there is also a committee which evaluates the ideas as they are added to the system. One of the respondents focussed on the danger of such a process: *"The other thing with a committee and grades is that you put that grade in a contextual situation. The idea is judged once – and then it is archived. And then the idea is doomed to carry that grade forever. It is like your old high-school grades - if you are to apply for a university program you should apply with this grade. This means that we potentially risk losing ideas that might be before its time. They drown because of their grade in a large database"* (D). Another respondent also explained that problems occur when an idea which is good, but not patentable is submitted into the system; the idea simply disappears. The ideas are stored in the system, but they get no subsequent support from that system, which, in turn, highlights the need for someone to be responsible for taking care of ideas in a company.

4.5 Idea responsibility

If no one is responsible for taking care of ideas there is a risk that these ideas will just vanish into thin air. This issue was touched upon by several respondents who seemed to reason differently. One of the companies considered it important to have someone who takes care of the ideas after they had been generated, such as in a creative workshop as part of a project: *"And with taking care of we mean that they should know what they want to achieve, what they want to do with them"* (A). In this company the respondent had also noted that each department collects the ideas that are relevant to them, without using any IT-system. It also appears that idea generation sessions had become some sort of marketplace for ideas, as ideas that arise during these sessions later on turned up in other departments or in other projects. At another company the idea management system was a part of the continuous improvement program and the incoming ideas were the direct responsibility of the line manager, *i.e.* the manager of the person who submitted the idea. *"The leaders are always responsible for the ideas of their associates. It's automatically. So if I give an idea into the system, my next boss will be the responsible guy for this idea.* […] *he is responsible to find out the right expert for the content of this idea"* (B).

But this was not the case in all of the companies. In one, where a committee has been used to evaluate the incoming ideas, responsibility was looked upon in a different manner. *"It is me as an idea owner that is responsible for putting* [an idea] *into the system. So I have also been motivated to do that since there has been a personal objective for how many ideas you should hand in. But all ideas have not been entered into the idea management system, but it is just the ideas that are in the system that are reviewed for patentability"* (D).

5 DISCUSSION

Results from this study are based on a cross-sector interview series with respondents deeply involved in innovation activities in seven different companies. However, only one respondent from each company was included which in turn limit generalizations.

First and foremost, it should be noted that few companies seemed to have a clear definition of an idea. This is noteworthy because a lack of a clear definition makes it more difficult to extract ideas from other types of information. Furthermore, few companies actually distinguished between ideas that had their origin in projects from ideas originating elsewhere. The result was that these ideas were channelled into the alternative routes (if they exist) for taking care of ideas (*e.g.* systems, innovation coaches or organisation and ideation sessions).

When it comes to the life of an idea following rejection, two main routes become apparent. Either the ideas were documented or stored in some sort of system or idea bank for later use (codification), or it was left to individuals within the company to carry them forward (personalisation), either implicitly or explicitly. Table 2 summarises the different approaches used by the participating companies.

Table 2: Approaches for dealing with rejected ideas, where C = Codification, P-I = Implicit Personalisation and P-E = Explicit Personalisation

Company		C	P-I	P-E
A	Documentation is carried out throughout the process, as well as in an idea generation session after a project is completed.	X		X
B	The manager is always responsible for the ideas of their associates. The company has a system to support working with ideas, and in this system it is possible to park ideas.	X		X
C	Templates are used in order to back-track the origin of a generated idea. Otherwise ideas are transferred through people.	X	X	
D	A system for managing ideas exists and the ideas have traditionally been evaluated by a committee. It has been up to the project groups which ideas that should be put into the system. Personal objectives for the number of ideas exist.	X	X	
E	A database for ideas exists in the company and the ideas are manually distributed to those to whom they may be relevant.	X	X	
F	A separate part of the organisation has been formed where ideas are given a second chance by entering a cross-functional process. The company is about to implement a system for managing the ideas.	X		X
G	No formalised process for dealing with rejected ideas exists, but they will probably be part of the innovation coach assignment that is a current initiative within the company.	X	X	

All companies codify the ideas, more or less, the big difference seems to be whether a system exists to manage the ideas or not. As can be seen in Table 1, codification of ideas is always complemented by some sort of personalisation approach, either implicitly or explicitly stated. The reason for this may be the two parts of the ideation process, as stated by Hansen and Andreasen (2006), *i.e.* the content of the idea and the carrier of the idea. Since a system can never have the intent, insight, and argumentation to fully carry an idea forward, the individual is key to the further life of an idea.

One approach, found in one of the companies, which appears to successfully combine codification with explicit personalisation, was the utilisation of idea generation sessions following the completion of a project. During these workshops, those who had worked on the project have the opportunity to discuss and develop the ideas that have been rejected to find suggestions on how to proceed with future projects. During the process rough concepts are explored and analysed by the participants, which results in both documentation and an embedding of ideas within individuals. This makes it easier for these people to remember the individual ideas and where the relevant documentation can be found.

5.1 Implications for theory and practice

Since ideas can be rejected for reasons related to either content or context, as time goes on, technology advance and priorities change these rejected ideas could become valuable. Since an apple does not fall far from the tree and a company is not transformed overnight, ideas rejected from current projects

should be particularly valuable. This applies especially to those ideas that have been a part of the development process and are a bit more elaborated and worked upon. Furthermore, as the ambition of companies today, to a large extent, is to shorten the product development time in order to become more competitive, it may be even more critical to manage ideas rejected from current projects. If these ideas are not given time to mature and develop and this as soon as possible, there is a risk that these ideas will not be ready for subsequent projects either.

The implication for managers and practitioners is that they should pay attention to these types of ideas within their organisation (i.e. incorporate the topic in current practices and process). One measure by which current working practices may be improved is to make it clear who has the responsibility for dealing with rejected ideas. As an example, managers should not only ask for lessons learned following the completion of a project, but also for rejected ideas and suggestions as to how to proceed. Rejected ideas can, by this method, be both codified and embedded in the minds of individuals.

The theoretical implication from this study is the importance of the personalisation approach when it comes to resurrecting rejected ideas. Whether or not the personalisation approach is implicit or explicit, it complements the codification approach in all the companies involved in this study. However, further research is needed in order to validate this result. A longitudinal study of how ideas are developed during a project, when the ideas are rejected and what happens to those ideas would be an interesting complement to the findings presented in this paper.

6 CONCLUSIONS

As innovative and novel ideas are 'too radical' and are thus more likely to be exposed to rejection and resistance than more conservative ideas, rejected ideas from projects could be seen as a potential goldmine of innovations. However, in order to utilise rejected ideas for innovation purposes it is vital that someone is responsible for those ideas, *i.e.* that some sort of process exists which prolongs the life of these ideas. This is consistent with the work of Schepers *et al*. (1999) which states that the underlying reason for idea pools becoming idea graves is that the responsibility for an idea is transferred to a system and does not remain with an individual.

Findings from this study also highlight how a codification approach was always complemented by a personalisation approach in each of the studied companies, whether implicit or explicitly stated. Examples of this were either related to organisational issues, *i.e*. implicit codification (using innovation coaches or a separate part of the organisation to work with these types of ideas), or ways of working, *i.e.* explicit personalisation (idea generation sessions for completing a project). This is important since a document or system can never fully carry an idea forward as they lack intent, insight, and argumentation.

Because projects are time limited, there is a risk that ideas, which are immature or ahead of their time, are rejected even though they have great potential. Therefore, it is important that ideas which have been rejected from projects are given the time and support necessary to allow them to reach maturity. One way for a manager to signal that these ideas are important is to identify them throughout the process and, in particular, after the completion of a project. To finalise a project with an idea generation session seems like a promising approach, allowing those involved in the project to reflect upon and document rejected ideas, *i.e.* combining codification and explicit personalisation approaches.

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