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The Ideas Competition as Tool of Change Management – Aspects of Triggering Ideas

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ABSTRACT

With our action research approach at BMW Group Financial Services Germany we explore the application of an Ideas Competition as tool of Change Management and look into the effects of the competition on the organizational change. In this paper, we examine the nature of ideas forwarded in the Ideas Competition, the influence the Ideas Competition has on the creation and contribution of ideas and the role of awards from an employees' perspective in the context of the change situation. Using predominantly the results of an online survey, we find an importance of the function of awards different from our expectations, we discover the trigger-effect of the competition on the development of ideas and we specify this effect in respect to the ideas' origin being within or without the employees' actual fields of function. Furthermore we indicate the high probability of ideas getting lost in the corporate environment.

Keywords

Ideas Competition, Innovation Management, Change Management, Organizational Change, Idea Management, Suggestion Schemes.

INTRODUCTION

The term Change Management from an employees' point of view is more likely to have a negative standing than being associated with promising views of future corporate-development (Cameron and Quinn, 2006). Organizational changes necessary to maintain competitive advantages often go hand in hand with insecurity affecting business culture.

The bias towards Innovation Management and related instruments like Idea Management and Ideas Competitions is neutral at the least, if not positive. The main reason for this might be that "innovation" is impressed with attributes corresponding with basic values like growth, thriving, self-fulfillment and technical enhancement (Hauschildt, 1997). Consequently, innovation-driven corporate events presumably do not encounter too much cultural resistance but will benefit from a good reputation and a sound commitment towards the project by those persons involved.

Of special interest to our research is the application of Innovation Management as tool of Change Management in a corporate environment. We concentrate on an Ideas Competition as specific instrument for generating innovations and analyze, whether the Ideas Competition positively influences organizational change. We address an explicit part of this wider scope of research with the research questions of this paper, exploring various aspects of the creation of ideas through the Ideas Competition in the context of a change environment.

Our research is an empiric, explorative approach using the method of action research and results in the building of theses. One premise making that approach possible was that one of the authors works for the organization department of BMW Group Financial Services Germany (BMW FS) where a change environment combined with considerations about Innovation Management could be found.

In the next section we display the set up of our research. Section three describes our methodology. In section four we present and discuss our research results, concluding with the development of theses. The last section offers a summary of our findings and suggests future research questions for this topic.

RESEARCH SET UP AT BMW GROUP FINANCIAL SERVICES

The situation which delivered the basic prerequisites for our research was found at BMW FS. Up to the point in time where our research started, there neither existed a systematic approach to Innovation Management nor a suggestion scheme to collect ideas with. In 2007 a change project was created to take adequate measures to ensure a certain operating income by the year 2010. This Change Management had the demanding task to communicate the change and involve the personnel in order to achieve the structural and financial objectives.

One measure accounted for in the project set-up was Innovation Management, mainly in the meaning of collecting content to help achieve the financial objectives. Simultaneously, the organization department worked on a concept of Innovation Management for BMW FS. In consultation with the Change Management it was decided to launch a conjoint innovation project. Since the constraints were various, dominated by scarcely time to concept, a low-to-nil cost policy, little personal capacity and a strong demand for quick results, the solution was an Ideas Competition aligned with the interests of the change project: The collection of employees' ideas directly focusing on the optimization of earnings, risk structures and cost structures. This clear strategic direction for the competition matches the first stage of the methodology stated by (Flynn, Dooley, O'Sullivan and Cormican, 2003) to effectively generate and manage innovation.

The choice of the systemic solution was the existing knowledge management platform of BMW FS. Besides low cost and time-savings this approach had the major advantage that the system and its handling were already widely known to employees. In our earlier work (Klein and Lechner, 2009) we describe how the knowledge platform had to be modified to serve as tool for the ideas competition and how employees reacted to this solution.

METHOD

Action Research Approach

Consistent with the specific need of in-depth knowledge of such a dynamic corporate environment and with our aspiration to affect and design the procedures ourselves, we applied the research method of action research. One of the researchers was responsible for the conceptual design of the Ideas Competition including the systemic solution, helped implementing the competition and supported the Change Management with the administration of the event. Subsequent to the Ideas Competition, the researcher explored the employees' attitude towards the competition and its settings with an online survey.

(Baskerville, 1999) defines the most common characteristics of action research as an orientation towards change and action, a practical problem focus, an "organic" process involving systematic and sometimes iterative stages, and collaboration among participants – all of which are applicable to the situation we find here. According to (Gilmore, Krantz and Ramirez, 1986) we aim "...to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously." The overall practical problem at BMW FS was to create a functioning Ideas Competition on short notice and to align it with the objectives of the change program. The scientific value of our approach is to contribute to a better understanding of the positive influence an Ideas Competition can have on organizational change.

The data to build our theories upon were collected by documenting the functional on-goings in the project, by experience through adherent social interactions of the researcher, by designing the Ideas Competition and by the online survey in form of a questionnaire. For addressing the research questions of this paper we mainly focus on the results of the online survey as the major source of our data.

Problem Solving Interest and Research Interest

In the course of the turbulent and time-critical dynamics of the project, many steps of our research cycle as set by (Baskerville, 1999) overlap. Following (McKay and Marshall, 2001) we consider our action research separated in two research cycles: One cycle reflects the researcher's **Problem Solving Interest**, the other represents the actual **Research Interest**. We iterate the research interest cycle as recommended by (Baskerville and Myers, 2004) and (O'Brien, 2001), eventually doing three research interest cycles. Our earlier work (Klein and Lechner, 2009) provides a more detailed account of both problem solving interest and research interest, accordingly to first approaching the subject and hence laying down the total of our methodical proceedings. Here we are content to give an overview of the problem solving interest cycle and concentrate on that research interest cycle that represents the online survey.

The **problem identification** as the start of the **Problem Solving Interest** cycle (**Figure 1**) showed the company's need to create an effective and efficient initiative for generating ideas and communicating the change to help achieve the

superordinate objectives of the change program. The **planning of the problem solving activities** resulted in the concept of the Ideas Competition and rendered the possibilities of a swift start of action and low cost compared to other alternatives.

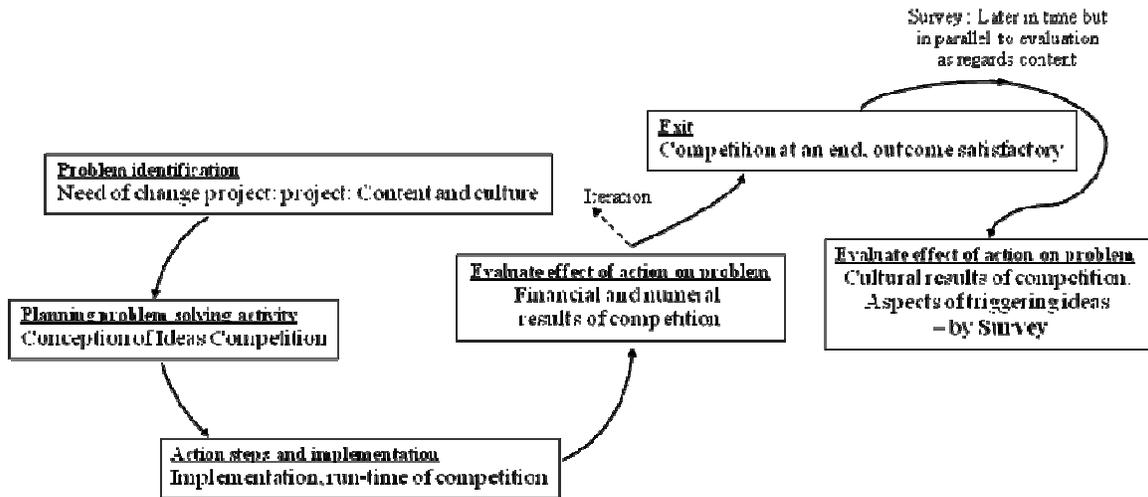


Figure 1. Problem Solving Interest cycle

Within three weeks all necessary **action steps** were taken to begin the implementation of the competition: A three months event inviting every employee to participate by placing his idea via the knowledge platform. The participants had a chance to win prizes in-kind and to have their name published on the ideas ranking list. The main prizes were allocated to the ranks one to seven, the first one an exclusive holiday voucher. The **implementation** of the competition roughly included the communication of the competition and the modification of the knowledge platform to serve as portal for ideas. The actual event generated inter alia the need of maintenance concerning the IT system, the major task of evaluating the ideas and the ceremonial event of awarding the winners as final act. The **evaluation of the effects of action on the problem** was consistent with the overall evaluation of the competition, namely its financial results and its effects on the change culture. The “hard facts” of the competition’s yield are the numbers of participation as well as the ideas’ financial potential. The competition’s perception by employees and its influence on the creation of ideas were obtained through the researcher’s survey. The actual **exit** of the PSI cycle occurred with the survey. Satisfied with the competition’s results and following the company’s course, which saw no necessity of an adjacent project of this sort at the time, there was no iteration.

Our research questions were the starting point of the final **Research Interest cycle (Figure 2)**. They were generated as result of the previous two Research Interest cycles. Following the research questions, we designed a **research project** to analyze the Ideas Competition. An online survey addressing ideally the whole headcount was the best option to collect the appropriate data. The survey allowed as well for using its results for the further development of Innovation Management at BMW FS and for giving a sound in-house feedback to the competition.

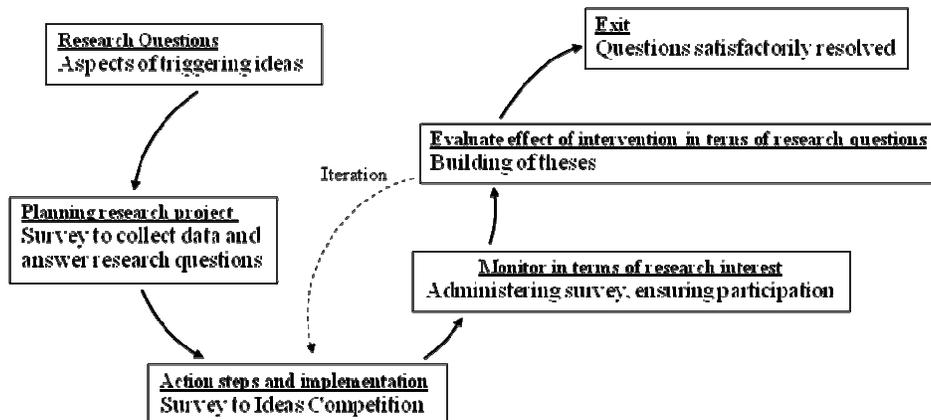


Figure 2. Research Interest cycle: Analyzing the Ideas Competition by survey

The practical **action and implementation** we refer to in this research interest cycle consequently is the survey following the Ideas Competition. All employees were called upon to participate in the anonymous online questionnaire. **Monitoring in terms of research interest** came down to administering the online-tool of the survey and to send a reminder-to-attend per email to ensure a sufficient rate of participation. The **evaluation of the intervention** in terms of research questions consisted of evaluating the collected data and building theses to answer the research questions. The satisfactorily resolving of the questions (McKay and Marshall, 2001) characterizes the **exit** from this cycle, falling together with the exit of the Problem Solving Interest cycle.

RESEARCH RESULTS

This section presents our research results starting with the numeral and financial results of the competition, followed by the results of the survey's data. Center of reference for the dedicated examination of our results are the research questions addressed in this paper:

- **Research Question (1):** What is the nature of the ideas forwarded in terms of quantity, quality, and coherence with the original fields of function of the employees?
- **Research Question (2):** Is there an influence of the Ideas Competition on the creation of ideas? How can it be described?
- **Research Question (3):** What is the perception and necessity of awards as incentives for participating in the Ideas Competition – especially in regard of the antithetic change situation?

Numeral and Financial Results

The Ideas Competition from a company's point of view was a success for all parties involved. The contribution to the Change Managements targets was greater than expected and the employees predominantly held a very positive opinion towards the competition. Additionally, about one sixth of employees when asked in the survey about a free criticism or comment expressed their wish for an Ideas Competition on a regular basis or for a constant Ideas Management.

In the almost three months event, employees contributed 330 ideas. The ideas were placed by 141 employees, leaving one participant with 2.3 ideas in the mean. I.e. we had a participation rate of 12%, referring to the headcount of ca. 1200 persons. This is not overly much, but interestingly the participating employees appeared to at least place a second idea in the average, speaking for a kind of an inhibition threshold for participation.

Figure 3 displays the incoming ideas volume per day. The strict deadline set for the end of the competition seemed to be a stimulator for the creation of ideas, with the biggest volume of ideas placed basically on the ending day. This circumstance also corresponds with "stress" being one of the factors enhancing creativity (Elam and Mead, 1987). What could be observed as well was an "ideas-peak" responding to a reminder email of the Change Management – the second biggest ideas inflow was counted on that day. This shows that also during the event adequate communication is crucial for a high participation rate and thus for the success of an Ideas Competition – consistent with the findings of (Leach, Stride and Wood, 2006) regarding publicity.

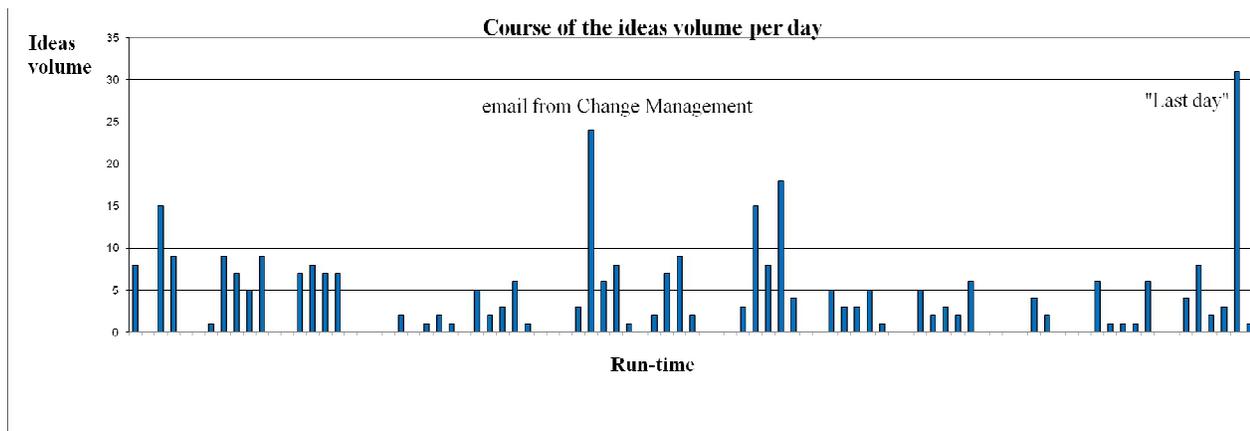


Figure 3. Volume of incoming ideas per day

The financial results of the Ideas Competition basically reflect the evaluation of the ideas, i.e. the summed up calculations of the anticipated profits before tax (PbT) of the winning ideas of rank one to seven. The criteria which the ideas were evaluated by were strongly geared to the targets of the change program. Compendiously, the competition rendered a calculated outcome approximately 95 times as high as the amount being invested. The latter includes the awards, the IT modifications and some matters of marketing; it does not include the expense through internal personal resources. Even in a more conservative attempt to look at these results, one tenth of the estimated outcome still makes a legitimate return on investment.

Scientific Results

The following analysis is based on our earlier work (Klein and Lechner, 2009). Those theses state inter alia that an Ideas Competition as tool of organizational change creates a greater awareness of the change and enhances its reception by employees, since the competition itself is still perceived as a rather positive corporate event. It furthermore improved the felt involvement of the personnel in the corporate development, consistent with the proposition of (Klotz, 1988), concerning suggestions schemes in general.

The survey subsequent to the competition is the major source of our data. It was implemented as an anonymous online questionnaire accessible through a link embedded in an email. The mail was sent by a member of the management board to the whole headcount and held the appeal to participate and help analyze the competition. The questionnaire consisted of 27 to 33 questions depending on the user’s having or not-having placed an idea and took approximately six to ten minutes to finish. It contained mostly multiple choice questions and few open text questions.

With 221 participants the net participation rate of the survey was about 19%, referring to the total headcount. The net participation rate accounts for the users that have continued through the questionnaire all to the end. The gross participation rate which characterizes the amount of employees having started the questionnaire was an approximately 27%. The rate decreased by 30% with the progression of the questions, as can be seen in **Figure 4**.

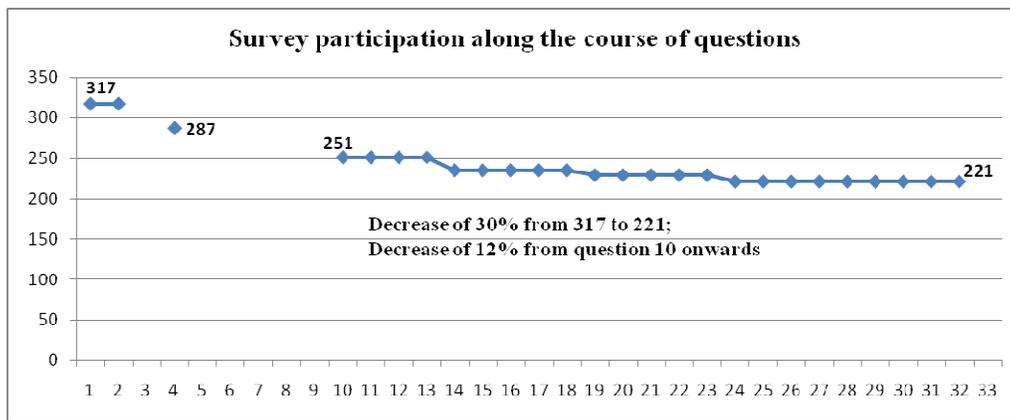


Figure 4. Survey participation

Separating the survey’s participants in ideas’ donors (IDs) and non ideas’ donors (NIDs) by a compulsory question at the beginning of the survey asking about the amount of ideas placed, we got a net participation of 95 IDs respectively 126 NIDs. Interestingly, the discrepancy between each net and gross participation was bigger with the NIDs’, showing a decrease of 39%, whereas the IDs’ participation lessened only by 15%. This results in a growing ratio of IDs to NIDs. **Figure 5** shows the ratio of IDs to NIDs increasing along the course of the questions.

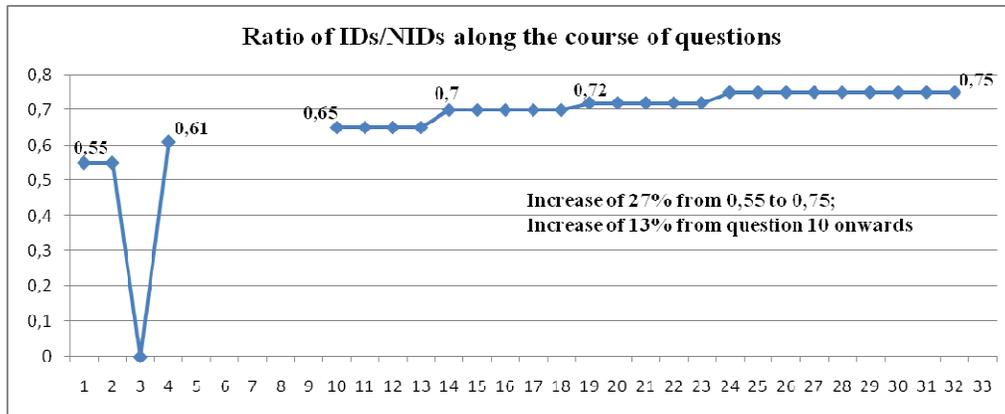


Figure 5. Ratio of Ideas Donors' to Non Ideas Donors' participation

Contemplating the figures of participation brings up the fact – referring to the net values – that 67% of IDs attended the survey and only 12% of the NIDs did as well. That leads to the conclusion of observing a case of self-selection affecting the quantitative participatory results of the survey in the way that a much higher proportion of IDs had the interest to be involved in the “aftermath” of the competition. However, we can exclude working with a biased sample. When taking into account a question given to both groups, we carefully consider the existence of the same characteristic of statement of IDs and NIDs.

As we are interested in the coherence of the ideas' contents with the original fields of function of the ideas' creators, we asked 103 IDs about this issue. The result is that 69% of the ideas coincided with the actual area of work of the IDs. Accordingly only close to one third of the ideas were creative in a “trans-functional” way. In general, permanent corporate Ideas Management only awards suggestions whose impact is beyond the field of activity of the idea creator. It was a distinguishing feature for the Ideas Competition that every idea was welcome. For the short duration of the competition and the equal short time span available to create a set up, it was both beneficial and necessary to accept every idea forwarded. Firstly, denial of participation would have been discouraging considering the appeal of the competition: “Be part of the change, help with your ideas!”; secondly many of the received ideas were still very valuable albeit their functional origin; and thirdly, the expense for either preparing the system to recognize these coherences or to figure them out manually would have been far too huge considering the given restrictions.

Still, this approximately 30/70 ratio we observe indicates a preference for possible creativity to happen in employees' own fields of expertise. Another point of view provides the “ethical” question of traditional Ideas Management about whether employees are not employed and paid for having those kinds of ideas. Many participants of the survey commented exactly on this circumstance. Asking for example 180 NIDs why they did not participate in the competition, 10% of them said because they considered having ideas as part of their daily work. Nevertheless we record that the majority of ideas originate in the actual fields of function of the IDs.

T1: *Without any constraints to the relation of ideas' contents with the ideas donors' area of employment, the majority of ideas contributed to a corporate Ideas Competition will be from within participants' own field of function.*

The contents of the collected ideas were considered to be of medium quality on average by the responsible team members of the change project in a sense that there were hardly groundbreaking ideas among them. Most of the suggestions were incremental improvements to existing structures, proceedings or products. This fits together well with the obvious assumption that employees are especially capable of finding minor improvements in their field of expertise. It also confirms the findings of (Vandenbosch, Saatcioglu and Fay, 2006) saying that ideas are generated all the time, but not all are really creative. One could argue in this context whether to call mere improvements of existing circumstances innovations, which was the case in the corporate use regarding the competition. One definition of innovation we lean on here follows (Damanpour, 1991) for whom “...innovation is defined as adoption of an internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization” without having the concrete need of a relation to the market or even success on the latter. We also follow (Rogers, 2003) who sees an even wider scope to an innovation as “...an idea, practice, or object that is perceived as new by an individual or other unit of adoption.”

To answer the question, if the Ideas Competition had any influence on the creation of ideas in the sense of stimulating creativity, we asked 105 IDs whether their ideas had existed before the competition or whether they developed them due to the competition's appeal. Multiple answers were possible considering employees forwarding more than one proposal. The

results as depicted in **Figure 6** show that 63% of the IDs picked the option “Already existed” – they had their ideas “stocked away”. Keeping in mind that there was no permanent Idea Management at BMW FS makes this figure less absolute.

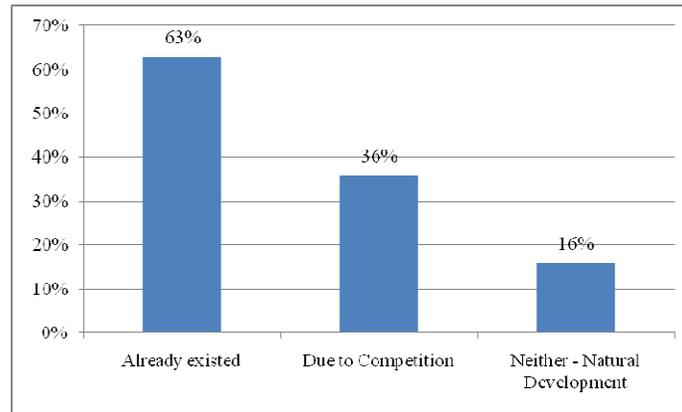


Figure 6. “Did you develop your idea(s) due to the appeal of the Ideas Competition or did it (they) already exist?”

Nevertheless, 36% created their idea(s) only after the competition’s request. Leaving aside the tendency of the proposals’ proximity to the IDs’ field of function, we have an impressive one third plus of the participating employees becoming active through the Ideas Competition and being creative by simply developing ideas. Another 16% claim a natural development regarding their ideas creation.

T2: *An Ideas Competition works as a trigger of creativity for employees: At least 25% of ideas’ donors develop new ideas due to the competition.*

We split up the above chart’s columns in two separate figures, one showing the stake of ideas coming from the IDs field of function the other showing the opposite. This provides further insight in the nature of the triggered creativity, as broached in Theses 1. The percentages depicted in **Figure 7** consequently refer to the entity of IDs saying either “from within my field of function” or “not from my field of function”. 70% of the IDs whose ideas came from their own domain had their proposals already existing. From those creating their proposal outside their job environment 47% had their ideas triggered by the competition – opposed to only 32% conveying from their own field of function.

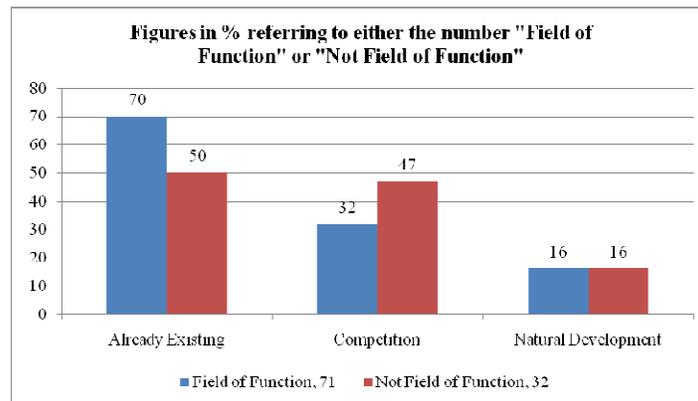


Figure 7. Combining the results about the ideas’ origins with the reasons for their creation

This 47% to 32% relation of the trans-functional and functional (=“my field of function”) ideas triggered by the competition shows that a higher percentage of trans-functional ideas were created due to the competition. Contemplating trans-functional ideas only, the Ideas Competition was likewise effective in absorbing already existing and new ideas, with 50% and 47%. In the case of natural development we find the same percentage on each side, speaking for a rather low, but equal stake of “normally grown” ideas both functional and trans-functional.

T3: *The Ideas Competition has a tendency of triggering the creation of a higher percentage of trans-functional ideas – in comparison to the percentage of functional ideas triggered by the competition.*

By questioning 105 IDs about their motivation to participate in the Ideas Competition we are able to look at the high percentage of already existing ideas from a renewed angle. The most voted for answer with 75% was “to support the company” (five answers provided, multiple answers possible). Second with 56% was the response “because I’ve had my idea for a while and saw an opportunity to place it”. This is more than half of the IDs virtually just having waited for an opportunity to place their existing idea(s). It further coincides clearly with the 63% stocking their existing ideas away. Setting this in relation with the fact that 70% of the ideas coming from within IDs’ own field of function did as well already exist (see **Figure 7**) leads us to the following thesis.

T4: *Within their own fields of function, at least 50% of employees’ ideas get stocked away and are not used for the company’s benefit.*

That may have reasons concerning inter alia the ideas’ contents or the nature of the employees’ standing and their networking contacts within their work environment. Regardless, we claim that Idea Management has to exist in a corporate environment to skim the whole innovation-potential of the personnel. According to (van Dijk and van den Ende, 2002) a suggestion scheme is the necessary basis for companies to exploit employee creativity as essential ingredient for the capacity to innovate. But moreover, we argue that Idea Management – especially for matters of appreciation of employees and for their convenience – should be qualified to collect and value all kinds of ideas, even if just awarding trans-functional ones.

In the matter of spending money on awards in spite of the controversial change situation we asked 103 IDs if they had participated without the prospect of an award. 84% of the IDs responded to this question (three answers provided) with “Yes”, 7% said “No” and another 10% said “I don’t know”, illustrated in **Figure 8** below.

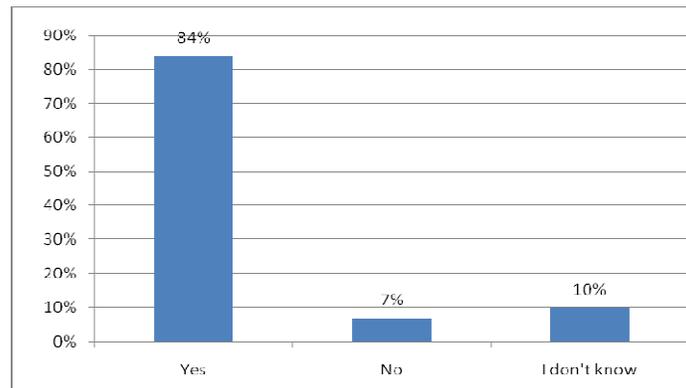


Figure 8. “Would you have participated in the Ideas Competition without the prospect of an award?”

We cross-check this very distinct statement by assessing the employees’ opinion about the awards. We want to make sure a possible lack of the awards’ attractiveness is not the reason for the one-sided distribution above. Asking 219 survey participants about their view of the Ideas Competition’s awards, providing four response-options and splitting the data into answers of IDs and NIDs, we get the following picture:

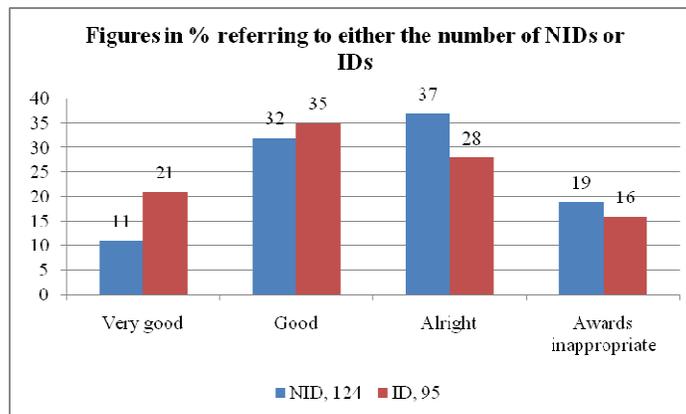


Figure 9. Employees’ opinion about the choice of awards

Figure 9 shows the clear trend we demonstrate with our earlier work (Klein and Lechner, 2009) of IDs answering more to the positive side considering facts about the competition. We still observe a considerable positive perception of the awards by NIDs. 80% of them thought the awards at least “Alright”, and 43% perceived them at least as “Good”. Of the 18% (combined) who found the “Awards Inappropriate”, 25% stated for a reason the “high cost of the awards averse to the critical change situation”. The latter opinion surfaced a few times in the survey, when participants had the possibility to give free comments. Bringing together the good the perception of the awards with the criticism regarding the controversial change situation and the willingness of employees to participate without the prospect of prizes, we find the awards as not necessary a part of triggering ideas in these circumstances.

T5: *An Ideas Competition used as strategic tool for Change Management does not necessarily need valuable awards as an incentive for participation.*

This also matches “...to support the company” as the major reason for participation in an Ideas Competition attached to organizational change (Klein and Lechner, 2009). It is contradictory though to the findings of (Rapp and Eklund, 2002) about the importance of the level of rewards for ideas about cost saving in a “normal” corporate suggestion scheme. Of course, the ceremony of the management board handing over the awards to the winners was “priceless” to the Ideas Competition, regarding the appreciation of the employees’ efforts. But matters of appreciation obviously are not categorically tied to the monetary value of awards.

SUMMARY

Further exploring the application of an Ideas Competition as a tool of Change Management, we build upon our earlier research and continue analyzing the data gained by our action research approach at BMW Group Financial Services Germany (BMW FS).

Our research follows questions about the nature of ideas forwarded in the Ideas Competition, about the influence the competition can have on the creation of ideas and about the role of awards from an employees’ perspective, especially in the context of the change situation. Using predominantly the data of an online questionnaire directed to the whole headcount of BMW FS to address our research questions, our research results in the building of theses. We find that a major part of the ideas contributed to the competition originate from employees’ own fields of function and that most of those ideas “waited for an opportunity” to be placed in the company. We further discover that the Ideas Competition triggers the creation of new ideas. We find that the creation of new ideas is especially stimulated for proposals from outside employees’ fields of function. Finally we observe the competition’s awards as incentives for participation to be of minor importance in the controversial situation of the organizational change.

Further research questions to this theme might investigate the reasons why many ideas within employees’ own field of work are stocked away; the mechanisms of appreciation and transparency in the context of change and Ideas Competition; the degree to which objectives of Change Management can be transferred to those of strategic Idea Management; instruments of Innovation Management being used as strategic tool to help achieve specific corporate objectives in general; or the factors of success for designing an adequate systemic solution to a strategic Idea Management.

The Ideas Competition at BMW FS was a corporate success and the findings and practical learnings are used for the further development and application of Innovation Management.

REFERENCES

1. Baskerville, R. (1999) Investigating Information Systems with Action Research, *CAIS*, 2, 19.
2. Baskerville, R. and Myers, M. (2004) Making IS Research Relevant to Practice –Foreword, *Special Issue on Action Research in Information Systems, MIS Quarterly* 28, 3, 329-335.
3. Cameron, K. and Quinn, R. (2006) *Diagnosing and Changing Organizational Culture*, Jossey-Bass, a Wiley Imprint, San Francisco.
4. Damanpour, F. (1991) Organizational Innovation: a Meta-Analysis of Effects of Determinants and Moderators, *Academy of Management Journal*, 34, 3, 555-590.
5. Van Dijk, C. and van den Ende, J. (2002) Suggestion systems: transferring employee creativity into practicable ideas, *R&D Management*, 32, 5, 387-395.
6. Elam, J. and Mead, M. (1987) Designing for creativity: Considerations for DSS development, *Information and Management*, 13, 5, 215–222.
7. Flynn, M., Dooley, L., O’Sullivan, D. and Cormican, K. (2003) Idea Management for Organizational Innovation, *International Journal of Innovation Management*, 7, 4, 417-442.
8. Gilmore, T., Krantz, J. and Ramirez, R. (1986) Action Based Modes of Inquiry and the Host-Researcher Relationship, *Consultation* 5, 3, 161.
9. Hauschildt, J. (1997) *Innovationsmanagement*, Verlag Franz Vahlen GmbH, München.
10. Klein, D. and Lechner, U. (2009) The Ideas Competition as Tool of Change Management – Participatory Behaviour and Cultural Perception, *Proceedings of the 20th Conference of the International Society for Innovation Management, Vienna, Austria, June 21st-24th 2009*.
11. Klotz, V. (1988) Staff suggestion schemes, *International Labor Review*, 127, 3.
12. Leach, D., Stride C. and Wood, S. (2006) The effectiveness of idea capture schemes, *International Journal of Innovation Management*, 10, 3, 325-350.
13. McKay, J. and Marshall, P. (2001) The dual imperatives of action research, *Information Technology & People*, 14, 1, 46-59.
14. O'Brien, R. (2001). Um exame da abordagem metodológica da pesquisa ação [An Overview of the Methodological Approach of Action Research], *Teoria e Prática da Pesquisa Ação [Theory and Practice of Action Research]*, João Pessoa, Brazil: Universidade Federal da Paraíba.
15. Rogers, E. M. (2003) *Diffusion of Innovations*, The Free Press, New York.
16. Rapp, C. and Eklund J. (2002) Sustainable development of improvement activities – the long-term operation of a suggestion scheme in a Swedish company, *Total Quality Management*, 13, 7, 945- 969.
17. Vandenbosch, B., Saatcioglu A. and Fay, S. (2006) Idea Management: A Systemic View, *Journal of Management Studies*, 43, 2, 259-288.