Good Practice at GASAG Group: Recommendations for the Application of Internal Crowdsourcing from a Business Perspective

Florian Porth

Abstract Developing innovative and marketable products and services and maintaining innovation capacity are basic prerequisites for a company's economic success and present implicit challenges in the adaptation to twenty-first-century needs. These success factors are put at risk by silo mentalities and by insufficiently pronounced cross-departmental knowledge transfers. The GASAG Group as a typical organizational layout of medium-sized enterprises in Germany has been and still is confronted with these challenges as well. In order to face them, the GASAG Group decided to work on company culture as well as to develop an open and innovative mindset, prompting it to join the ICU (ICU stands for 'Internal Crowdsourcing in Enterprises' and is a joint project funded by the Federal Ministry of Research and Education (BMBF) and the European Social Fund (ESF) for a period of 3 years, from June 2017 to May 2020, under the funding measure 'Work in the Digitalised World' and supervised by the project management organization Karlsruhe. The project goal was the development of an employee-friendly cross-industry reference model for Internal Crowdsourcing.). Research Project in 2017. The aim of this chapter is to describe the ICU approach from the practical, company perspective of the GASAG Group and to map out identified success factors as well as provide general recommendations for the implementation of Internal Crowdsourcing in a business environment.

Keywords Good Practice · Platform development · Crowdsourcing campaigns · Success factors

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1 Introduction

The GASAG Group is a leading energy service provider in the Berlin-Brandenburg metropolitan region with a tradition spanning 170 years. The group consists of 19 subsidiaries with 1600 employees. Their core business is the transportation, distribution and sale of energy and heat and, to an increasing extent, the provision of energy services and the generation of renewable energies. The GASAG Group's business activities involve the transportation, storage, distribution and sale of natural gas, heat, electricity and water, the production of biogas and electricity from renewable sources, the operation of facilities for distributed energy supply and the provision of energy services. The customer base includes private households, trade and industry, companies in the housing sector, hospitals and municipal entities, redistributors and users of gas transport services.

Despite being a successful company for more than 170 years, the GASAG Group faces the challenges presented by the typical organizational layout of small- and medium-sized enterprises in Germany as well as the challenges implicit in adapting to twenty-first-century needs (Pohlisch 2019),¹ especially when it comes to silo mentalities, and insufficiently pronounced cross-departmental knowledge transfers.

The feeling of affiliation among the employees of the GASAG Group was experienced as being stronger towards their own division or employer company, than to the corporate group as a whole. Therefore, the employee's knowledge and expertise, often spread beyond their usual ranges of duty, has often been skimmed within employees' own departments or divisions. There has been little use to date of the potentials offered by a cross-company knowledge transfer within the GASAG Group. Solutions to problems are generally generated within single departments or divisions. In short, the wisdom of the crowd hasn't been utilized to its full value, and the result has been that there is room for improvement in shortening processing periods, in increasing flexibility and agility and in promoting a bottom-up innovation culture.

As a reaction to these circumstances, the management board decided to take action to increase company activities offering employee participation, especially in the fields of idea generation, innovation and process improvement. Innovative ideas were to be discussed within a broader group of people beyond the boundaries of divisions and individual enterprises. Fast and agile collaboration methods were to be tested and encouraged, the goal being that these measures also improve cross-departmental communications and implementation speed and strengthen the corporate group identity.

At that time, the Technical University of Berlin introduced the ICU Research Project funded by the Ministry of Education and Research and the European Social Fund to the GASAG Group and proposed a scientific partnership to develop—

¹Pohlisch, Jakob (2019). Bericht—Innovationsaktivitäten Deutscher Unternehmen. Technische Universität Berlin, Fachgebiet Innovation Economics. Berlin. Available online at <https://tubcloud.tu-berlin.de/s/2m2BzwNyR3T9s8a#pdfviewer>

together with the project consortium—a process as well as a digital and groupwide platform for Internal Crowdsourcing. The project consortium, the implementation partners and the extended project network aimed to design a cross-sector reference model for Internal Crowdsourcing.

Both, the Technical University of Berlin's research objectives and the GASAG Group's strategic corporate goals, had strong overlaps and the potential to support each other. For that reason, both institutions as well as other cooperation partners agreed to join the ICU Project.

2 Solution Approach: GASAG Good-Practice Model

The GASAG Group's specific objective within the research project was to put the theoretical model for Internal Crowdsourcing into practice and adapt, test and develop it in order to create a Good-Practice model for companies in the service sector. In addition, labour law and operational procedural standards were to be developed. All inner-company interest groups were involved in the project, from the workforce through the works council to corporate management.

The research layout, developed by the ICU Project's cooperation partners, concerning GASAG as the application and implementation case, can be sketched as follows: In the first step, an 8-month planning process was initiated. Several employee workshops and interviews were used to determine the platform's design and functionalities. Furthermore, in cooperation with the external project partners, strategies for the platform community management as well as incentive systems were developed, and a realization process for participation campaigns was designed.

This planning process was followed by another 8-month phase in order to test platform functionalities and participation campaign mechanisms within the corporate group. Within that phase, various data and statistics were gathered and analysed. The resulting, now more specific knowledge on participation rates as well as campaign and platform functionalities was used to review the initial strategies and plans regarding the digital platform.

The last phase carried out at the GASAG Group was the best-practice phase, where all lessons learned in the pilot phase were used to optimize platform functionalities and realization processes for participation campaigns.

2.1 Platform Development

To make sure the majority of the GASAG Group's employees have easy and fast access to the Internal Crowdsourcing approach at different locations, the approach is conducted on a technical Internet platform developed by the project partner Crowdee GmbH. To make sure the platform design and functionalities and Internal Crowdsourcing workflows fit the needs of the GASAG Group's employees, several

workshops and focus interviews with employees and executives were held within the planning phase.

From an employee perspective, evaluating a submitted proposal required comprehensible, transparent decision criteria, as well as well-founded feedback concerning each rejected proposal, in order to express appreciation for the efforts made.

Furthermore, a high level of transparency regarding the benefits of everyone's own engagement was an important motivating factor. This meant that the effects of the ideas introduced had to be clearly documented on the platform and made public in order to stimulate the intrinsic motivation for further participations.

Each employee was also to decide individually whether their ideas were to be submitted anonymously or using their name, in order to prevent proposals from being evaluated based on their authorship and to give employees additional support in the event of conflicts with higher hierarchical levels. On the other hand, anonymous submissions might also encourage reluctant employees to participate and avoid discrimination.

Additionally, the employees questioned warned us not to overestimate the IT affinity of many colleagues.

Based on the insights gathered, a design concept and a content concept were developed as well as a requirements specification document for the technical developer.

The platform was intended to be as intuitive as possible with a self-explanatory menu structure and fewer submenus. Besides the menu areas for crowdsourcing campaigns and results, the content concept also contained additional information and details about the advantages of Internal Crowdsourcing as a collaboration method as well as practical examples from other companies already using Internal Crowdsourcing successfully. There is also a 'how-to' area that, among other things, includes the GASAG Group's internal works agreement on Internal Crowdsourcing. All three were intended to lend the by then quite unknown working method more credence and acceptance among the staff.

One lesson learned from the platform development is that it is necessary to fully integrate the technical platform in the company's IT infrastructure, meaning to have a single-sign-on workflow for the platform users. In the case of the GASAG Group, the single-sign-on functionality wasn't part of the requirement specifications in the first place. As a result, employees were required to create an individual user account what led to dissatisfaction with the additional effort as well as fear among employees that their personal data would be used for non-business purposes by external companies.

2.2 *Campaign Phases and the Internal Crowdsourcing Workflow*

Before the first Internal Crowdsourcing campaigns were carried out, it was necessary to modulate an ideal-typical implementation process. The ICU phased model, developed by the Institute of Vocational Education and Work Studies of the Technical University of Berlin (IBBA), was used as a guideline for the practical application at GASAG AG ensuring that the required steps of an Internal Crowdsourcing process were executed. It proposed the following steps: (1) impetus, (2) decision, (3) conceptualization, (4) execution, (5) assessment, (6) exploitation and (7) feedback (see chapter “Systematization Approach for the Development and Description of an Internal Crowdsourcing System”). This theoretical process model was transferred and adapted to the specific situation and needs at the GASAG Group.

1. *Impetus*: Ideally, within this process step, possible campaign topics are submitted to the crowd team by employees or the management via the Internal Crowdsourcing platform. Nevertheless, to get the Internal Crowdsourcing going within the GASAG Group, it was necessary to actively search for appropriate campaign topics within the company. Several roadshow formats were held in order to introduce this new collaboration method to departments, employees and managers. These roadshows also offered the possibility of brainstorming possible campaign topics.
2. *Decision*: A crowdsourcing campaign needed to fit certain criteria in order to underline its meaningfulness from the perspective of potential participants. These criteria were, among others, a clear and comprehensible utility for the campaign owner and a concrete concept for further utilization of the campaign results.
3. *Conceptualization*: The campaign design included determining the task design (crowdstorming, crowdvoting, crowdsolving, crowdcreation, crowdtesting), formulating detailed job descriptions, choosing specific target groups, formulating campaign goals and expectations, deciding how to utilize the anticipated results, choosing appropriate incentive schemes and creating a campaign schedule (go-live, duration, deadlines, events, etc.). It was also very important in this process phase to develop a communication strategy, including selecting internal communication channels (online vs. offline) and defining a detailed action plan for the community and crowd management.
4. *Execution*: In this phase, the campaign concept was put into practice and monitored over the entire time. For GASAG AG, a mix between offline (posters, flyers) and online communications measures (intranet, email-newsletter) has had the greatest impact in promoting Internal Crowdsourcing campaigns. Campaign periods of 3–4 weeks with weekly participation reminders sent via internal communication channels delivered the best participation results. Periods of less than 3 weeks might possibly reduce the chance for every willing employee to participate due to office absence or simply due to time constraints. Campaigns

longer than 4 weeks did not increase participation rates significantly. Instead, they only prolonged the campaign without any additional benefits and increased the waiting period for campaign results. Another important lesson learned was that the original campaign period planned sometimes had to be increased while a campaign was running, due to a lack of participation.

5. *Assessment*: After completing the execution phase, the results were compiled and delivered to the content owner, who had to decide how to use them effectively. In order to communicate the results as fast as possible to the crowd and the community, it is necessary to set a deadline for the content owner. Also, providing assistance to the content owner in interpreting the results was helpful.
6. *Exploitation*: In this process phase, the content owner announced to the crowd team how the results would be used. This step is very important because it gives meaning to the input of each participant. If the final communication lacks information about the further exploitation of the campaign results, the participants may feel that the time they have spent is not valued and has therefore been badly invested. This might lead to them not participating in future campaigns again.
7. *Feedback*: The final communication including campaign description, results and further utilization was then compiled by the campaign manager and sent to the owner for final approval. Afterwards, the results were published on the Internal Crowdsourcing platform and communicated via GASAG's internal communication channels.

One lesson learned from the practical execution of the Internal Crowdsourcing process is that not every steering task described in the ideal ICU phased model is necessary or realizable for every campaign. Sometimes certain steps are set by default or cannot be executed due to internal limitations, for example, choice of internal communication channels and creation of a campaign schedule. Sometimes certain tasks are consolidated or have to be carried out in a different chronological order. Nevertheless, the process components as such remain the same, and the existence of a detailed theoretical process flow is still very helpful as a checklist.

2.3 Selection of Internal Crowdsourcing Campaigns

The implementation of Internal Crowdsourcing in the GASAG Group had three main objectives: (1) to increase activities that offered employee participation, (2) to support the innovation management and (3) to support employees in developing their skills. The campaign topics were specifically chosen in order to support these objectives.

Ten Internal Crowdsourcing campaigns were implemented as part of the project. Five of those campaigns can be associated with the task type 'crowdstorming'. One campaign can be seen as 'crowdvoting'. Three campaigns contained both crowdstorming and crowdvoting elements. One campaign was an example of 'crowdcreation'. The number of participants ranged from 8 to 147, while the number

of registered users on the platform increased to 535 (about 30% of the workforce). The platform monitoring has shown that the majority of the registered employees monitor the Internal Crowdsourcing activities passively, while only a small number actively participate. Campaigns that targeted cultural aspects in the broadest sense and campaigns where employees had the possibility to influence or change their personal work environment had the highest participation rates. Campaigns regarding the GASAG Group's products and services had significantly lower participation rates.

Exemplary campaigns:

- *Naming the new corporate office building:* When the GASAG Group moved to new headquarters in Berlin, it was necessary to find an adequate name for this building to be used for internal and external communications. In order to find a well-suited name that employees could also identify with, the department for real estate management executed an Internal Crowdsourcing campaign. The campaign was divided into three parts. The first part consisted of a crowdstorming. The GASAG Group employees were asked to brainstorm possible names and submit them to the Internal Crowdsourcing platform. In the second step, the crowdvoting, the employees were asked to go through the final list and mark their favourite names with a 'like'. This resulted in a top-5 ranking of the suggested names most popular with employees. In the last step, the GASAG Group Management Board chose the final name for the company's new headquarters from this list. The entire process, including planning and execution of the campaign, lasted around 4 months. More than 130 employees participated in this campaign.
- *Go-to-market review:* In order to support the GASAG Group's innovation management, the product department used the platform to solve one of the current challenges it is facing. The department conducted an Internal Crowdsourcing campaign to have a go-to-market strategy reviewed and evaluated by the employees. The product and its features were presented to the employees on the crowdsourcing platform along with detailed questions regarding the product features and pricing strategies. The participating employees had the chance to evaluate the product and its pricing models and point out potentials for optimization. The product and its go-to-market strategy were revised afterwards based on the new insights. The planning and execution of this campaign required 3 months' time and 25 employees participated.
- *Future competencies:* The objective to increase the development of employees' competencies by implementing Internal Crowdsourcing was supported by the Human Resources department. As part of strategic staff development, the department conducted an Internal Crowdsourcing campaign with the goal of having a new training module developed by employees. The employees were asked to answer the questions 'Which competencies will be most important in your work environment within the next 5 years?' and 'Which competencies will be most important for you in particular within the next 5 years?'. Each question could be answered based on multiple-choice answers from a predetermined competence catalogue. The results of that campaign were used to revise the GASAG Group's

internal training opportunities. Three months were needed to plan and execute the entire campaign, and it motivated 41 employees to take part in it.

- *Crowdcreation 'learning formats'*: In cooperation with the GASAG Group, colleagues from Strategic Personnel Development, the content structure for implementing the crowdsourcing discipline 'crowd creation' was developed, and the corresponding content was created. The staff from the GASAG Group were asked on the crowdsourcing platform to develop concepts for new learning formats that could potentially optimize the GASAG Group's internal training opportunities. In a second step, the employees had the chance to present their concepts on the crowdsourcing platform and pitch them against each other. Event vouchers for the Mercedes-Benz Arena in Berlin to the amount of 250 euros were awarded as a prize for the winners. To ensure that the concepts submitted by the employees were comparable, the participants had to fulfill different requirement criteria in their concept and answer various key questions. For example, describe the target groups, the required working materials, the structure as well as the structure of the learning format or the requirements for the trainer/moderator. After two employees from the GASAG Group submitted their concepts, the project team put them into a uniform structure and published them for the entire workforce with a request for feedback. Following that, the concept owners had the chance to rewrite their concepts based on the feedback submitted. A jury consisting of employees from the Strategic Personnel Development team then had to name the winning concept. Regardless of the feedback from the workforce, the jury team decided to award both of the concepts for new learning formats submitted as winners, as both concepts were of very high quality in terms of their content but were difficult to compare due to their different approaches. The planning and execution of the campaign lasted 4 months. The Strategic Personnel Development team aimed to implement both concepts in 2020.

An important lesson learned regarding the selection of Internal Crowdsourcing campaign topics is that, despite intense promotion and efforts to encourage participation, it was hard to find departments and executives willing to contribute appropriate campaign topics. On the one hand, executives seem to be more likely to choose established and reliable working methods to solve their department's tasks than to try other methods. On the other hand, executives were worried about making what they are working on transparent and did not want to hand over control of the solution process to employees from other departments.

2.4 Works Agreement

When implementing a new working method like Internal Crowdsourcing, to be executed with a new technical application, a lot of questions arise from both employees and management. These include the following: Who is allowed to participate? Is participation permitted during and/or outside of working hours? Is

data security ensured? Who can read my content? Is it possible to participate anonymously? A works agreement was developed as part of the project in order to address these questions and to establish a transparent companywide guideline with labour regulations regarding Internal Crowdsourcing.

2.5 Internal Communication and Community Management

As described above, the GASAG Group's employees, executives and works councils were involved in the planning process and took part in workshops and focus interviews.

Within these workshops and interviews, the participants were asked for ideas about what content would be suitable for Internal Crowdsourcing campaigns. The participants also had the chance to outline their personal wishes, goals and concerns regarding the implementation of Internal Crowdsourcing.

In addition, a communication strategy was created with detailed descriptions of stakeholders, target groups, goals, channels and instruments.

To further support the flow of communication, roadshows were executed within the GASAG Group's departments to promote the project, the Internet platform, workflows and advantages of Internal Crowdsourcing.

3 Critical Success Factors

As described above, the ICU Project had an 8-month phase during which it could test platform functionalities and campaign participation mechanisms within the corporate group. During that phase, various data and statistics were gathered and analysed. The resulting, now more specific knowledge on participation rates as well as campaign and platform functionalities were used to review the initial strategies and plans regarding the digital platform as well as to identify critical success factors that seem to have a critical impact on the successful launch of Internal Crowdsourcing solutions.

In order to validate the success factors identified within the GASAG Group, different companies running similar Internal Crowdsourcing platforms were interviewed with the aim of exchanging information about their experiences with these. A comparison of the interview results showed that there were certain factors all interviewed companies had in common with the success factors identified by the GASAG Group. The critical success factors are described below.

3.1 Management Commitment

Internal Crowdsourcing solutions were implemented successfully particularly in companies where the management board actively supported the project. The management commitment was mainly expressed by committing the managerial staff to use the Internal Crowdsourcing solutions to outline their goals. Some of the companies even had target agreements with the managerial staff that demanded the use of Internal Crowdsourcing. By comparison, companies without a clear management commitment regularly struggled to find relevant crowdsourcing topics. Since using new techniques and working methods to solve tasks often entails extra effort in order to familiarize oneself with the new processes, managerial staff sometimes tend to abstain from trying new methods when it is not mandatory for them to use these.

3.2 Clear and Precise Goals

Internal Crowdsourcing solutions are successfully implemented especially in those companies that had clear and precise goals that aligned with the overall strategic direction of the company. For example, some Internal Crowdsourcing solutions aimed to identify revenue or savings potentials. Others had the primary goal of developing new products and business models. Only topics that aimed at these goals could be published on the platforms. As opposed to this, companies without a clearly worded crowdsourcing strategy struggled to find relevant crowdsourcing topics on a regular basis, because internal stakeholders and managerial staff could not identify a clear utility or added value of the new Internal Crowdsourcing solutions with respect to their individual tasks.

3.3 Companywide Agreements

Works agreements containing transparent companywide guidelines and labour regulations regarding Internal Crowdsourcing are a major factor contributing to the successful implementation of this new working method. A clear and transparent works agreement creates trust and clarity on the use options and opportunities for participation.

3.4 Company Culture and Leadership Culture

Companies planning to implement an Internal Crowdsourcing solution should consider that establishing new ways of collaboration and delegation takes some

time for familiarization, especially if the company has a more traditional and hierarchical business environment. Managerial staff may not be used to implementing participation instruments in order to solve a task. Employees may not be used to having the freedom to participate in topics beyond their usual range of duties. The readjustment in the leadership and company culture takes a lot of change management efforts, and the features and benefits need to be communicated well. Therefore, companies with a more traditional and hierarchical business environment that plan to implement an Internal Crowdsourcing solution should calculate bigger investments in change management as well as sufficient time for people to become used to this new work feature, until it establishes itself as a work habit within the company.

3.5 *Project Schedule*

The kick-off date for an Internal Crowdsourcing platform should be well-timed. Companies planning to implement Internal Crowdsourcing solutions need to identify a reasonable time slot by overviewing the company's project portfolio concerning competing projects and by monitoring the status quo of the company's strategic goals. Furthermore, the kick-off date for individual participation formats within the scope of Internal Crowdsourcing needs to be chosen wisely. In a fiscal year, companies go through phases that are more or less suitable to start employee participation workflows. Periods like holiday seasons, annual closures or the high season should be examined critically as, during such times, employees possibly won't have time to participate or are simply out of the office. This could lower participation rates and threaten the success of the project.

3.6 *Further Theses*

In addition to the identified success factors, the project has spawned further thoughts and theses that can be examined in further research. For example, one could argue that the use of digital applications for Internal Crowdsourcing is more suitable for larger, more anonymous and complex organizations than for small- and medium-sized companies. The involvement of colleagues from other departments in developing solutions may be more difficult to implement in major corporations than in small- and medium-sized companies, which is why the use of central, digital platforms promises greater added value here. In medium-sized companies such as the GASAG Group, on the other hand, collaboration on topics is more shaped by personal relationships, joint meetings or workshops. Even under the condition of finding interdisciplinary and cross-departmental solutions, non-digital formats of Internal Crowdsourcing have been able to produce faster and higher-quality results than using digital platforms.

4 Conclusion

The focus of the ICU Project was to develop a cross-industry reference model for the implementation of Internal Crowdsourcing in a corporate environment, in order to support companies in mobilizing existing, unused knowledge and skills internally, networking them across divisions and integrating them productively into company processes.

To develop this reference model, case studies were analysed and a theoretical model for Internal Crowdsourcing was developed by the project partners from the Technical University of Berlin. This theoretical Internal Crowdsourcing model was adapted by the GASAG Group for their own application, tested and further developed into a model for 'Good Practice' for Internal Crowdsourcing in the service sector. The project consortium, the implementation partners and the extended project network then formed this model into a cross-sector reference model.

As part of the project, several success factors for the implementation of Internal Crowdsourcing in a corporate environment could be identified. These success factors can be grouped in the categories:

- Management commitment
- Clear and precise goals
- Works agreements
- Company culture and leadership culture
- Project schedule

A detailed checklist including guiding questions for each category can be found at the end of this article.

Even though this list is not intended to be complete, companies planning to implement Internal Crowdsourcing workflows to their business environment may take a more in-depth look into these success factors in order to increase the probability of a successful launch.

When it comes to further research, one question that emerged within the ICU Project was whether the use of digital applications for Internal Crowdsourcing is more suitable for larger, more anonymous major organizations than for small- and medium-sized companies.

4.1 Checklist 'Critical Success Factors for the Implementation of Internal Crowdsourcing'

1. Management Commitment

- Make sure the management board actively endorses the project.
- Make sure the management board actively supports the project while it is ongoing.

- Make sure that target agreements with the managerial staff for the use of Internal Crowdsourcing methods are implemented.

2. Clear and Precise Goals

- Make sure the Internal Crowdsourcing approach has clear and precise goals that align with the overall strategic direction of the company.
- Make sure Internal Crowdsourcing supports the company's current strategic goals.
- Make sure that internal stakeholders, employees and managerial staff see a clear utility or added value for their work to be gained by using Internal Crowdsourcing solutions.

3. Works Agreement

- Make sure a works agreement containing transparent companywide guidelines and labour regulations regarding Internal Crowdsourcing is implemented.

4. Company Culture and Leadership Culture

- Make sure bigger investments in change management measures are calculated within the project budget.
- Make sure sufficient time is scheduled in the project for employees and managerial staff to familiarize themselves with it.
- Make sure the management board understands the need for the investments in change management and the familiarization period.

5. Project Schedule

- Make sure no competing projects that endanger the successful implementation of Internal Crowdsourcing are to be launched during the project period.
- Identify a reasonable time slot for the kick-off of Internal Crowdsourcing projects or campaigns by bypassing holiday seasons, annual closures or high seasons.

Florian Porth studied Business Administration in Berlin and works as project manager focusing on digital transformation. At the GASAG Group, he initially started as a member of the project team and later became fully responsible for the introduction of Internal Crowdsourcing in the GASAG Group.

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