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### Article — Published Version Opening the floodgates: How big companies can reap the benefits of internal crowdfunding

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### Opening the floodgates: How big companies can reap the benefits of internal crowdfunding



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#### **KEYWORDS**

Crowdfunding; Distributed decisionmaking; Internal crowdfunding; Intrapreneurship; Ideation; Siemens **Abstract** Digital technologies enable employees at all levels to participate in distributed decision-making. We examine the design principles, benefits, and challenges of a new type of distributed decision-making: internal crowdfunding. We build on a 5-year case study of internal crowdfunding contests at Siemens to deepen our understanding of the design principles of internal crowdfunding and its potential for corporate innovation. Based on this data, we discuss the three design choices in internal crowdfunding (contributors, configuration, and control), find four key benefits (decentralization, cross-collaboration, institutionalization, and intrapreneurship), and identify three key challenges (dealing with rejected ideas, evaluation biases, and implementation and follow-on funding) and potential actions by managers to overcome them. The article contributes to both the emerging literature on internal crowdfunding and the literature on distributed decision-making.

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### 1. Internal crowdfunding as a decisionmaking tool

Traditionally, top managers are the ones who select important projects, allocate funds, and make budget decisions (Colombo et al., 2021;

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Keum & See, 2017). But organizations, enabled by digital transformation, are increasingly involving their employees more broadly in finding and implementing the next big idea. Companies such as IBM, Daimler, Lufthansa, Küehne + Nagel, Audi, and Siemens have been adapting external crowdfunding methods and applying them internally in the form of internal crowdfunding (see also Feldmann et al., 2014; Feldmann & Gimpel, 2016). Through this new method, a range of cutting-edge ideas on visionary topics, such as offshore seaweed farming, novel Bluetooth beacons, and intelligent chatbots for new job applicants, have been developed and subsequently transformed into prototypes or products.

Internal crowdfunding transfers external crowdfunding principles into an organization: Employees share ideas and a budget goal for implementation, while other employees fund-or do not fund-these ideas with slices of the corporate budget (e.g., Feldmann et al., 2014; Feldmann & Gimpel, 2016; Schoettl et al., 2023; Schweisfurth et al., 2023). Internal crowdfunding allows employees to seek internal support for their projects, to tap into new budgets outside their units, and to foster intrapreneurship in the company. While external crowdfunding via Kickstarter, Indiegogo, or Crowdfunder has become a somewhat vanilla tool for startups and ventures seeking funding and feedback for their ideas, internal crowdfunding is fairly new to the corporate toolbox.

To learn more about internal crowdfunding, we conducted a 5-year study of nine consecutive funding rounds within Siemens. Siemens is Europe's largest industrial manufacturing company; its crowdfunding program has been recognized by the US business magazine Fast Company and won the International Society for Professional Innovation Management (ISPIM) Grand Prize 2018. We provided assistance during the design of contests, observed participants, conducted experiments, and interviewed participants and decisionmakers. One of the authors has been a senior innovation manager at Siemens and the initiator of its crowdfunding program, overseeing all of the firm's crowdfunding campaigns. Another author had dual roles as an innovation manager at Siemens and as a PhD researcher outlining Siemens' crowdfunding in depth.

This article introduces internal crowdfunding as a decision-making tool for collaboration, bottomup strategizing, and innovation in firms. We present how Siemens implemented design elements of internal crowdfunding, which can help managers to successfully build internal crowdfunding initiatives. We explore the benefits and problems associated with internal crowdfunding and identify actions taken by Siemens to address these challenges. Drawing on follow-up interviews with other firms that are using internal crowdfunding tools, we also touch on different campaign designs and outcomes.

### 2. What is internal crowdfunding?

Internal crowdfunding is a type of *crowdsourcing*: an open-call task performed by a large group of individuals (Howe, 2006). In internal crowdfunding, this large group consists of a firm's employees, making it a type of internal crowdsourcing (see Bayus, 2013); the open-call task requires decisionmaking on idea evaluation and funding, making it a crowdfunding type (see Mollick, 2014). Instead of relying on managers, who traditionally evaluate and select ideas, firms can delegate decisionmaking tasks to their internal crowds (Zuchowski et al., 2016). Simons et al. (2019, p. 118) characterized internal crowdfunding as a tool "to foster innovation and collaboration among employees, who propose and evaluate project ideas on Intranet platforms by allocating company money." To date, the scarce research on internal crowdfunding has focused mainly on success factors, finding funding success to be increased by shared attributes (Muller et al., 2014; Schweisfurth et al., 2023), idea elaboration (Feldmann & Gimpel, 2016), and the cocreating of ideas (Muller et al., 2016).

### 3. Our research and data

This article builds on a 5-year single case study of internal crowdfunding at Siemens, Europe's largest industrial manufacturer. As internal crowdfunding is a new phenomenon that is not well understood, case-study methodology is appropriate to help us identify relevant constructs and processes (Edmondson & McManus, 2007). Relying on Siemens as a single case is warranted, since the firm has been a forerunner in conducting internal crowdfunding sustainably and successfully; thus, this case promises insights that we could not have gained by delving into any other organization (see Siggelkow, 2007).

Siemens started internal crowdfunding in 2015 and has since carried out nine funding rounds, with a total volume of  $\in$ 4 million. Our research team had access to all relevant documents, internal campaign databases, and other team members. One of the authors cofounded Siemens' internal crowdfunding program and led all the campaigns. Our data collection drew on direct and observational experience of all crowdfunding campaigns conducted to date, as well as a survey with Siemens employees and 22 interviews with ideators and investors. We also conducted two quantitative analyses: the analysis of decision biases in 20,405 crowd investment decisions (Schweisfurth et al., 2023) and a field experiment to investigate framing's effects on investor behaviors (Schoettl et al., 2023). While these studies did not directly inform the insights we present here, they helped us to understand the mechanics and outcomes of the internal crowdfunding processes at Siemens. We also drew on four follow-up interviews with platform managers at three other large companies that are utilizing internal crowdfunding.

Our data analysis strategy was to incorporate all collected data into a holistic approach, allowing us to draw robust insights from the various data elements. Specifically, using Siemens as major single case, we conducted a thematic analysis across all data sources so as to identify recurring themes, patterns, and anomalies. This built a deep understanding of all the existing practices. Triangulating multiple data sources helped us to validate our findings. Comparing and cross-referencing data from different crowdfunding campaigns, employee feedback from interviews, and the survey helped us to ensure validity and to generate a wellrounded understanding of the phenomenon at Siemens.

Then, we gathered anecdotal evidence from internal crowdfunding initiatives in three additional large firms and contrasted Siemens' practices with theirs. This surfaced a diversity of campaign designs, potential best practices, and common challenges.

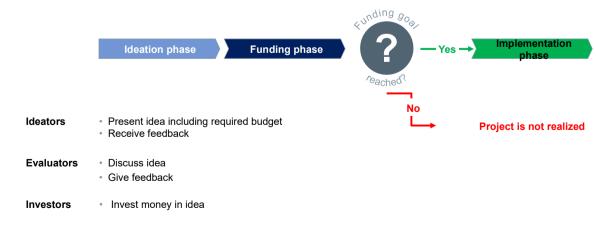
## 4. How internal crowdfunding works at Siemens

In the initial phase of a Siemens' internal crowdfunding campaign—the *ideation phase*—employees present ideas or projects that they have developed and wish to realize on an internal platform. These proposals include a description of the idea and its value to the firm, the requested budget, and an implementation timeline. Fellow employees from around the world can "like" ideas and can provide feedback and support. This phase typically involves high participation: several thousand employees from more than 50 countries like the ideas, and hundreds of comments are posted.

In the next phase—funding—employees throughout the company can apply for a personal budget to invest in others' ideas; that is, they take the roles of funders or investors. At Siemens, the choice to become an investor is open to everyone. If there is a restriction on the number of investor positions, selection occurs either randomly or on a first-come-first-served basis.

If an idea gets the requested funds, it automatically proceeds to the *implementation phase* without further management approval being required. Here, project owners realize the projects and inform internal investors and other participants of their projects' progress (see Figure 1).

But the crowdfunding journey involves more than just these phases; it also involves careful design considerations that underpin them. We will now shed light on three crucial questions that managers need to answer if they want to make the most of internal crowdfunding.





# 4.1. How Siemens designs internal crowdfunding campaigns: Design choices in internal crowdfunding

We organize our discussion around three topic areas that managers at Siemens dealt with when designing internal crowdfunding campaigns: contributors (which crowds to attract and how to keep the contributors motivated), platform configuration (how to configure the platform), and control (how much control to retain over outcomes) (see Figure 2).

### 4.1.1. Contributors: Which crowds to attract and how to keep contributors motivated

Three groups determine internal crowdfunding campaigns' success (Muller et al., 2013): ideators, investors, and employees at large, who comment, like, or lurk. In deciding between these groups' suggestions, managers will have to make some strategic choices. They must balance the expertise

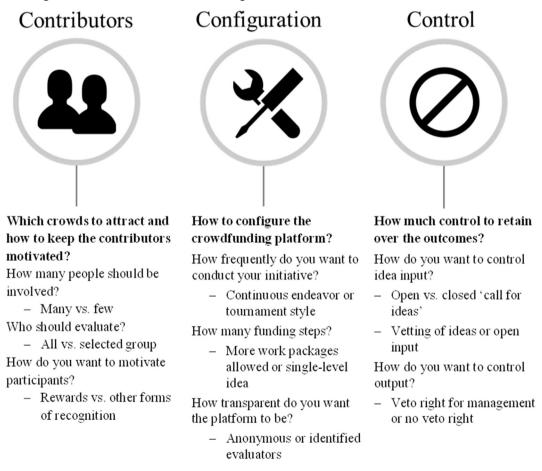
of a small, knowledgeable crowd in a specific domain with the diversity and the heterogeneous knowledge that comes with greater openness.

At Siemens, invitations to submit ideas were typically sent out to 5,000 to 10,000 employees, with a smaller contest inviting just 500 employees to contribute ideas. Groups of this size generated a satisfactory number of ideas per round. Making a campaign too narrow results in constant struggles to rally potential participants and bring in ideas, while making it too broad may render a campaign unmanageable.

Regarding investors, Siemens mostly opened the choice to become an investor to all its employees. If a limited number of investor positions were available, investors were chosen randomly or on a first-come-first-served basis.

To motivate the participants, managers in charge of designing an internal crowdfunding campaign should conceive incentives for ideators, investors, and commentors. For instance,

Figure 2. Design choices in internal crowdfunding



managers could consider rewarding employees for their engagement with monetary prizes or even with a share of the revenue of implemented ideas—though, so far, no internal crowdfunding contest we have studied has provided employees with monetary incentives. Instead, participating employees were motivated by the potential budget for implementation, by gaining visibility for their ideas, and by managerial attention.

Investors at Siemens were motivated by the empowerment that comes with being able to decide the research and development budget, by the positive feeling that accompanies sharing their competencies, and by learning about innovative ideas:

That was nice. It actually became a reality. I could see with my own eyes that the money I invested was spent well. I love that the Quickstarter ideas really came alive. (113)

Further, managers can facilitate learning opportunities for investors. For instance, they can schedule investor briefings after each campaign or can show the investors records of accomplishment. Since Siemens' second campaign in 2015, when the internal crowdfunding program became better known throughout the firm, the number of investor applications has far exceeded the available positions, and no financial incentives were needed.

For commentors, Siemens started its crowdfunding competitions by giving away iPads to reward the best comments, but it abandoned this approach after the first campaign. Instead, the campaign team began to nominate special moderators with large networks of colleagues who could forward ideas to potential experts to spark conversation. The experts did not need special incentives to comment or to share their knowledge.

### 4.1.2. Configuration: How to configure the crowdfunding platform

Here, Siemens managers considered three key dimensions: the timeframe, the funding mechanism, and platform transparency. Internal crowdfunding campaigns at Siemens have been conducted as recurring tournaments with limited timeframes. The campaigns have usually lasted around 6 weeks, and each investor received around  $\in$ 3,000 to invest in ideas; thus, the total budget was fixed beforehand. While most participants appreciated the tournaments and the fast decisions they engendered, a few considered alternative options:

I would like Quickstarter to be an ongoing process. Not just a few days, a few weeks, all

of this preparation, and then the money is spent and gone within seconds. It would be great if every now and then a new project is presented for which funding can then be collected. (19)

A related choice is that between a single- and a multilevel campaign, both of which were tried at Siemens. This choice is between an all-or-nothing approach, where ideas that exceed the budget receive no funding and are not implemented, and a staggered approach that involves funding one or more work packages. For instance, an idea creator could propose an idea with \$3,000 earmarked for conceptual planning, \$5,000 for market testing, and \$10,000 for the building of a prototype. The staggered approach would fund several partial projects with lower barriers to entry, giving more ideators opportunities to get seed funding; however, these projects are typically small in scope.

Finally, platform configuration involves decisions regarding transparency. These decisions will be affected by legal requirements and the company's innovation goals. For instance, in countries with strict labor laws, companies may be required to hide the idea creators' names, the investors' names, and the individual investment amounts. It may also make sense to hide ideators' identities and to reveal them only after the investment period, so as to prevent personal signaling from distorting investment decisions.

At Siemens, anonymous idea submission was possible in most countries—and legally required in one—yet no ideator who was free to choose did in fact select this option. Commentors had to reveal their real names so as to create an atmosphere of trust and openness. Investor identities were kept hidden at every stage to prevent peer pressure for funding.

### 4.1.3. Control: How much control to retain over outcomes

Internal crowdfunding can democratize innovation. For this to occur, managers must trust their employees' wisdom. Depending on how much control they wish to retain, they have to consider two important areas: control of idea input and output.

There are different approaches regarding a campaign's specific topic area. A call for particular ideas in a domain can be broadcast, or a campaign could be left open to all ideas. The latter approach benefits from allowing disruptive and out-of-thebox ideas with a higher potential for failure. At Siemens' central technology department, all Quickstarter rounds were open to all ideas, while three campaigns in different business units had more focused setups.

Although it is possible to vet incoming ideas and to decide upfront which ones may enter the funding phase, in our experience, it is advantageous to open up the platform to all ideas. This approach signals trust in employees, which was mentioned as a key motivating factor by interviewees:

Sometimes you have ideas for which you see the connection, but it is hard to convince other people if you don't have anything to show...they may not see the value at first, but once you have something to show, they will see the value. (118)

Experience at Siemens also showed that it is not necessary to grant managers a veto right to prevent ideas that may be detrimental to the firm's goals from being funded. In nearly all cases, the crowd chose projects that were beneficial to the company. Notably, at Siemens, some of the most popular ideas were not funded. A thorough analysis of the comments showed that, although these ideas were socially desirable (e.g., an app to deliver home-cooked meals in India), they did not fit the corporate portfolio, and investors considered this and responded accordingly.

Another scenario that became well known among Siemens managers was what would happen if employees funded a beer garden on the premises with their crowdfunding budget. Again, this beer garden problem never came into play: The least business-relevant idea funded in Round 1 was an internal childcare program during vacation time, which was so successful that the human resources department took it on permanently.

Managers who exert too much control early on in the process by vetoing or vetting ideas may undermine employees' engagement and motivation. At Siemens, control does come into play at a later stage. The ideas prototyped through internal crowdfunding require additional management decisions, follow-on funding, and an interface to the firm's usual innovation process, which offers more control options.

### 4.2. What are the benefits of internal crowdfunding for Siemens?

In our interviews, we asked managers in charge of internal crowdfunding as well as employees throughout Siemens about the benefits of internal crowdfunding compared with traditional innovation processes at the firm. Our data analysis and coding revealed four key benefits: decentralization, cross-collaboration, institutionalization, and intrapreneurship (see Figure 3).

#### 4.2.1. Decentralization

Internal crowdfunding provides a tool with which to match ideas, capabilities, and budgets from across the organization on one platform. It allows employees from any department to take part in ideation and evaluation: In the ideation phase, internal crowdfunding picks up new trends, weak signals, and dispersed ideas, helping organizations

Decentralization	<b>Cross-collaboration</b>	Institutionalization	Intrapreneurship
Internal crowdfunding	Internal crowdfunding	Internal crowdfunding	Internal crowdfunding
<ul> <li>taps new sources for generating 'outside-the- box' ideas</li> <li>accelerates solution development while reducing expenses on bad ideas through early- stage, broad feedback</li> <li>counteracts myopia and path dependancy in idea evaluation</li> </ul>	<ul> <li>leverages diverse employee talents and experience</li> <li>facilitates shared development and evolution of solutions on the platform</li> <li>kick-starts new working relationships across departments, functions, hierarchies, thus breaking up silos</li> </ul>	<ul> <li>creates transparency, giving bootlegged projects a stage</li> <li>draws broad attention to potentially disruptive and blind-spot ideas, which are otherwise reported to immediate supervisors only</li> <li>provides short-cut through organizational barriers for ideas outside the goals of immediate supervisor/department/function</li> </ul>	<ul> <li>increases motivation of idea champions for implementation</li> <li>enriches skillset from R&amp;D employee to intrapreneur</li> <li>produces prototypes early on and collects feedback</li> </ul>

#### Figure 3. Benefits of internal crowdfunding

to leverage their employees' talent and experience. Hidden ideas that are grounded in contextspecific expert knowledge gain visibility. The following interviewee quotes illustrate this:

I think it's the idea that Quickstarter will look into many areas, not just the ones that Siemens is addressing right now, because you never know what talents or ideas you have in the company. Focusing only on the existing business would be shortsighted. (I15)

They say we want to find new opportunities and business models, but if you're a developer rather than a top manager, you aren't supposed to do this! If you try, then very quickly you will be told that this isn't your job! Don't talk to anyone outside the company; we don't want to cause any confusion. Only after you have this foot in the door, through Quickstarter, only then are you able to take the first steps to be able to really assess the possibility of doing something innovative like this. This is maybe the most important aspect! (I1)

Opening these floodgates of innovation often leads to an abundance of diverse ideas; for Siemens, usually at least 100 ideas per contest. These ranged from simple yet powerful ideas, like "blind" lunch dates matched according to employees' preferred locations, times, and interests (more than 20,000 employees have already used this grassroots tool), to 3D-printed camera cases useful for inspecting gas turbines during operation (the temperature in the combustion chamber reaches 1,500 °C), to intelligent railway axles. Most of the ideas were fairly technical.

In the funding phase, internal crowdfunding not only makes decision-making more transparent but also helps to distribute efforts across many persons' shoulders, effectively democratizing it. Ideally, this approach marries two aspects of distributed knowledge: technical expertise and different perspectives. On the one hand, many of the investors we interviewed reported that they focused their assessment efforts on ideas in their areas of expertise; on the other hand, investors from very different hierarchical levels and with very different backgrounds brought their experiences and skills to the funding decisions. Leveraging different perspectives on ideas mitigates myopia and path-dependency in idea selection. For instance, internal crowdfunding investors were among the first supporters of the idea to establish the Siemens AI Lab, which today spearheads Siemens' industrial artificial intelligence (AI) efforts.

### 4.2.2. Cross-collaboration

Internal crowdfunding helps organizations learn by bridging knowledge fields and kickstarting collaborations among otherwise distant employees. Employees from different locations, departments, hierarchies, and functions jointly contribute ideas and jointly comment on, refine, and codevelop solutions. Single ideators can meet as-yetunknown peers with complementary knowledge and experience and can therefore form new project teams: further, investors can indicate their interest in participating in a project. The following quotes illustrate the potentials for new collaborations:

It was great to see who is actually working on similar topics as me. Several times, I went, "Oh, look, these guys are also now working on [topic X]." (I5)

Yes, I know a few things that other colleagues are doing, but mainly colleagues and our department and such, but still I don't know what is being done in other departments or parts of the company. So, yes, I could peak under the hood of what others are doing. It was interesting. (I16)

If I were to name the biggest advantages of Quickstarter, first it would be the possibility to further elaborate the idea, to get feedback. Second, to really establish the team and gather supporters to collaborate with, even though most of them were not even from [my department] and do it in their free time. (I1)

This benefit is exemplified by a Siemens team working on an offshore seaweed farming idea. It consisted of employees from four countries, different hierarchies, and different functions. They would not have met in the course of their daily jobs, although they share the same passion for sustainable solutions.

This opportunity for cross-collaboration is recognized by employees: More than 62% of the ideators we surveyed stated that they uploaded ideas because they wanted to collaborate with colleagues from other departments. They indicated that building their knowledge about other colleagues' activities was a key benefit of internal crowdfunding.

### 4.2.3. Institutionalization

An internal crowdfunding platform creates transparency by offering a stage for skunkworks. Usually, ideas are reported to immediate supervisors only if they fit their department's specific goals. An internal crowdfunding campaign can be a shortcut through organizational barriers to ideas that benefit the organization as a whole, or a different part of the organization, as the following quotes illustrate:

If I as a manager don't have the vision to invest in a certain area, then maybe someone else has the courage to present such a project on the platform and get funding for it there. (I4)

It makes sense to me to raise topics in Quickstarter that don't have a natural home in a specific department...ideas that fall squarely into one department and would also be implemented by that department should succeed the normal way, not via Quickstarter. For Quickstarter, it's the ideas that don't yet have a place. (I12)

If it is an idea that is very obvious for Siemens that it is useful, you would probably find other ways to fund it. If the business unit thinks this is very important, they would fund it. (118)

I invested in [project Y]. It is very innovative, but also very risky. What they want to do is at least a concept study, whether it's possible. I think that, for this kind of idea, it would be really hard to find a business unit to finance this idea within Siemens. Until they have a clear project plan, it isn't even possible to show an idea to a project manager. (I15)

An example of discovering a valuable blind-spot idea was provided by a team of ideators working on improving nondestructive testing methods. They proposed building a prototype to inspect wind turbines with nondestructive testing technology on drones, an idea that fell outside their department's current technical focus but that was potentially valuable for Siemens' wind turbine unit.

#### 4.2.4. Intrapreneurship

Internal crowdfunding makes the innovation process more intrapreneurial. Participants in internal crowdfunding were intrinsically motivated champions of their ideas. They felt empowered by having opportunities to develop their ideas into solutions, or to help fund others' ideas. They acquired new intrapreneurial skills, such as creating pitches, leading cross-functional teams, and driving their projects as ventures inside the company. Early feedback in the ideation phase helped idea owners to accelerate the development of practical solutions and to weed out bad or redundant ideas early on.

The idea is good...He talked about it very often. He has thought about the idea for one or two years and I knew that he's passionate about it. (I15)

It wasn't a disaster if the idea didn't work out; after all, the funding and the time investment were limited. You didn't have to spend six months applying for funding. It felt really good. (I5)

Siemens managers stated that, compared with the traditional approach, internal crowdfunding accelerates the decision process from an idea to its implementation (or cancellation).

Another problem is that if a normal project is funded, it is very hard to cancel, because you've already made the investment and people are working on it...In innovation, what you want is to quickly try an idea. If it doesn't work, you should be honest—it was a good idea and it didn't work, so we're going to cancel it. So, it is hard to cancel projects in the normal innovation process. (I15)

Intrapreneurs can test specific ideas' viability early on; many ideas result in a minimum viable product in the form of a tangible prototype. In one case, an engineer proposed a new design for a centralized beacon platform and proved its technical viability in a prototype. After this success, management decided to fund the general rollout of this technology within Siemens. Another example is a semiautomated labeling tool for Al solutions that started as a small prototype and is now used in Siemens products.

### 4.3. Challenges in internal crowdfunding and how to overcome them

As beneficial as internal crowdfunding can be, it also comes with several challenges. Our research at Siemens led us to identify three key challenges and potential actions from managers to overcome them. These are: dealing with rejected ideas, evaluation biases, and implementation and followon funding.

### 4.3.1. Dealing with rejected ideas

To uphold ideators' motivation, firms must deal with (and not simply cast aside) ideas that did not receive the desired funding. Siemens offered special coaching for any project that did not reach its funding goal, which some ideators gladly accepted. Further, the Siemens Technology Accelerator, which seeks to build new businesses with cutting-edge Siemens technologies, looked at all failed projects and picked some for its own program. The managers we talked to were convinced that communicating why an idea was rejected is crucial to retaining motivation. Emphasizing that an idea's value also depends on time and context, our informants stressed that rejected ideas could easily be resubmitted for funding in the future.

### 4.3.2. Evaluation biases

The decentralized nature of decision-making may introduce new biases. For instance, we found that investors favored ideas from ideators from similar hierarchical levels, with whom they shared a social identity—as long as they were not competitors (Schweisfurth et al., 2023). Also, like in external crowdfunding, herding effects can occur when investors wait for signals and then follow the crowd instead of revealing their true preferences. At the same time, biases are not unique to internal crowdfunding. In fact, it is precisely because traditional decision-making is biased that internal crowdfunding is gaining traction.

A remedy depends on the specific case. For instance, if managers believe that their firm's crowd is highly susceptible to herding behavior, one could reveal each idea's funding status only at the end of the funding phase, thereby preventing herding. Another way to minimize evaluation biases could be to increase investor accountability (which Siemens considered and rejected). One interviewee suggested:

Well, it's a bit different to Kickstarter, because you're not investing your own money. You are more involved in the result there. (I16)

What I would suggest as an improvement is that maybe investors would have to give some of their own money:  $\in$  100 or something small. That would make people think more about whether they want to become investors. (I1)

**4.3.3. Implementation and follow-on funding** Internal crowdfunding provides seed funding for early-stage ideas. In this embryonic stage, ideas and projects are often out in the wild, on their own, especially after crowdfunding funds have run out. These ideas make tempting targets for termination because they have not followed the standard process, which causes managers to presume a lack of fit with the firm's structures and processes. An exploitation strategy should indicate what happens to ideas after the initial funding has run out, so as to protect internal crowdfunding ideas. Will they be handed over to a business unit, sold, accelerated, or funded by another source? One interviewee reported:

My main concern is whether the amount of funding that could be raised is really sufficient to begin to tackle a problem...it only ever provided enough resources to undertake a preliminary investigation. It was a good way to give people the resources and opportunities to work on a problem that interests them...and then perhaps it would be possible to catalyze and present the results to other, more traditional funding approaches. (I8)

### 5. Discussion

In sum, while internal crowdfunding must be actively managed to overcome roadblocks that can emerge at different points in the process, it may be well worth the investment, since the benefits for innovation, collaboration, and employee engagement are significant. One of our interviewees emphasized: "I was totally surprised when Quickstarter started, that a company like Siemens would set up something like it. I was very surprised. I couldn't believe it!" (I7).

But internal crowdfunding's novelty also requires organizations to experiment to discover the best ways to use this tool to derive maximum value. While Siemens exemplifies a successful model, anecdotal evidence from three other firms we interviewed suggests that there are multiple paths to harnessing internal crowdfunding's potentials.

• Focused vs. broad scope: Regarding idea contributors, one other firm adopted a unique strategy, extending an open invitation to all its employees to solve technology-, customer-, or trend-oriented challenges. While different from the more focused setup at Siemens, this strategy had a significant impact, with up to 30% of the firm's employees becoming monthly active users of its internal crowdfunding platform.

- Continuous engagement: Unlike the recurring tournaments at Siemens, another firm created sustained engagement with a continuous format for idea generation and funding, underscoring the importance of an approach's adaptability. The firm opted for a continuous format, in which each investor began with a starting budget of €1,000 and was topped up with an additional €85 a month. This approach made their campaigns more sustainable, enabling continuous inflow and evaluation of innovative ideas.
- Transparency: Yet another firm, unlike Siemens, chose to reveal investor identities to demonstrate that influential people in the organization endorsed particular ideas and were willing to risk their reputations and budgets. This move, which stood in stark contrast to the investor anonymity maintained at other companies, may have contributed to an increased perceived value of the ideas and higher confidence among contributors.
- Evolving platforms: At Firm C, the crowdfunding platform was extended by its users, with additional functionalities being financed by investors on the platform—an innovative approach to developing the platform alongside the crowdfunding campaigns.

The diverse strategies used by Siemens and the three other firms show that there is no one-size-fits-all model for internal crowdfunding. Every organization must develop its approach based on its organizational structure, culture, and strategic goals.

In sum, internal crowdfunding offers an exciting and transformative avenue for organizations to foster innovation and collaboration. More research and implementation will extend our understanding of its benefits, trade-offs, and limitations. The companies we studied benefitted from internal crowdfunding in that employees valued the opportunities for innovation, collaboration, and employee engagement opened by this fresh approach.

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