Crowdfunding and innovation: IBM

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Metadata Record: [https://dspace.lboro.ac.uk/2134/22948](https://dspace.lboro.ac.uk/2134/22948)

Version: Published

Publisher: Elliott & Thompson

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IBM's crowdfunding efforts can be grouped into two phases. The first "experimental" stage was started on a small scale in 2012 by the IBM Research division and consisted of an internal platform on which employees of the IBM Research division could pitch potential projects and company purchases, addressing both individual and organizational needs. Employees could invest their allocated budgets from corporate funds into one or more proposals on a "spend-it-or-lose-it" basis. They could follow, critique, share or comment on projects as well as suggest improvements. As a result, the crowdfunding platform was used by more employees than other internal collaboration tools at IBM and projects reflecting previously unsatisfied needs and beyond day-to-day assignments were funded.

The second phase started in 2013 when leadership of the enterprise crowdfunding project was transferred to a larger department within IBM—the CIO Organization, which handles internal IT work for IBM. Due to its larger scope, individual budgets (and the total fund) were increased, but investments were limited to software and technology-related projects. In 2014 enterprise crowdfunding was opened to the whole of IBM, and this time the theme was limited to mobile applications. Employee engagement and cross-departmental collaboration increased, and a variety of
successfully funded projects demonstrated employee innovation and entrepreneurship. The investment decision-making process was considerably improved, with employees seeing their projects through from origination to deployment in a much shorter period of time.

IBM has been setting the pace for technological innovation since 1945. Its history includes five Nobel prizes and the most U.S. patents that any company has held for the past twenty years. Today it has the broadest range of patented technologies in the industry. Since 1998, IBM has also been at the forefront of open-source innovation and crowdsourcing, working with collaborative communities on the development of its Linux operating system and software products. In addition to its crowdsourcing engagement, IBM has been testing innovative systems for employee-initiated contributions since 2005, and its first crowdfunding project—the 1×5 project—was duly deployed in 2012.

1×5 project
IBM’s 1×5 project was one of the world’s first enterprise crowdfunding projects. For the purposes of its first trial run, a time limit of thirty-five days was imposed based on research suggesting that shorter durations encourage focus and a sense of urgency in large-scale inter-organizational collaborations (Millen and Fontaine, 2003). According to Michael Muller, an ACM Distinguished Scientist at IBM Research, the idea for this platform was originated when a Research Vice-President at IBM decided to reinvigorate the innovation culture. It was for this purpose that IBM
Research set up an internal platform on which employees could pitch potential projects and company purchases, addressing both individual and organizational needs. A total of 511 employees were included in the first phase of the project. They received a fixed budget of $100 per person, which they could invest in one or more proposals by other employees on a "spend-it-or-lose-it" basis. Projects ranged from the purchase of an office 3D printer to hosting a lecture series.

Furthermore, employees could follow, critique, share, or comment on the projects as well as suggest improvements. Some proposers, or "ideators," offered rewards to investors, such as priority usage of the future resource. They were also allowed to enlist teams of IBMers who volunteered their expertise and time to help develop the crowd-funded projects. Participation in the project as a whole was entirely voluntary. At the start and throughout the trial, the Vice President of the sponsoring department (which provided corporate funds) sent frequent announcements on the progress of the crowdfunding campaign—a form of communication by top leadership that proved to be important.

The 1×5 project successfully reached its goal of employee-generated innovation. The headline outcomes were:

Higher employee participation than in other social media applications
A total of 48 percent of employees from the sponsoring department took part in the project and nineteen proposals (or 56 percent of projects) were successfully
funded. This compares to a 40 percent success rate at Kickstarter, 13 percent in the most active online communities of IBM, and 10 percent participation in social media applications. Some 32 percent of the available funds were awarded to the nineteen successful projects.

**Proposals addressed diverse individual and organizational needs and involved extensive inter-departmental collaboration**

In general, proposals related to such employee needs as new and challenging technologies, resources needed to work, and extensions of cultures of experimentation and morale boosters. The project gave employees a greater voice in the innovation process, supported interdepartmental collaboration, and brought people together to meet their shared needs. Proposers reported that 42 percent of support for their individual projects came from employees unknown to them.

According to Michael Muller, who ran both trials for the 1×5 project, “Groups came together finding out that they had the same needs and launched projects together. People started working together for mutual success. Even when two projects were funded in the same area, employees started working together instead of against each other. And in the end both projects got funded. Employees with successfully funded projects benefited by doing good and by speeding up their careers.” Overall, the 1×5 project facilitated decision-making processes regarding investments, which were
traditionally characterized by a long set of approvals and some bureaucracy.

_Funded projects reflected previously unsatisfied needs and needs beyond day-to-day assignments_  
Employees appeared to use the 1×5 project to get resources that served the specific needs of disciplines non-core to their organization where funding was more difficult to get through traditional methods. For example, most funded (and pitched) projects were in the categories of equipment (3D printer, robotics, sports equipment), Internet accounts (micro-tasking tools, surveys), and morale-boosters (i.e. beverages).

Another motivation for funding the projects lay in the pursuit of particular technological interests that did not coincide with the main assignments of employees. Such proposals were creative (robotics) or contributed to the development of knowledge that would be valuable in the future (3D printer).

Innovative promotion strategies by proposers to potential investors seemed to play an important role. The overall success was due to concretizing the innovation process around monetary contributions and change in employees’ workplaces, as well as opportunity to join forces with others around topics initiated by employees themselves.

**iFundIT project overview**  
The success of the 1×5 project caught the interest of IBM’s CIO Organization, a 6,000 employee division that handles
internal IT for IBM. The CIO division seemed an appropriate fit for enterprise crowdfunding as it was strongly virtualized and decentralized, with some employees working entirely from home. The 1x5 project was a new technology and enabled innovation on a much broader scale and hence appealed to the core purpose of the CIO organization, which was aimed at fostering employee collaboration and innovation. The 1x5 software tool was changed slightly to adapt it to a larger organization. Françoise LeGoues, the former Vice-President for Innovation in the CIO Organization who was leading this initiative, recalls that she was initially skeptical of this new experiment and was not aware of any firm outside IBM experimenting with enterprise crowdfunding—but the project ended up being a total success.

The 2013 trial at the IT department had a larger scope, was focused entirely on software and technology, and was thought of as a replacement to traditional methods of innovation. In due course the project was rebranded to the unequivocal name of iFundIT. Again, participation was voluntary and opt-in. A total of 302 employees registered and received a personal budget of $2,000 each.

In 2014, participation was opened up to the whole of IBM, but the theme was limited to mobile applications; an increasing proportion of employees relied on mobile phones to do their jobs, while there was a clear shortage of mobile apps that could be used to facilitate their daily tasks. To match this need, the CIO organization invested a considerable share of its 2014 IT budget with the goal of giving all 400,000 IBM employees the chance to become an "ideator"
or an investor. From June to November 2014, 6,000 employees from thirty-five countries registered as investors. The successful investors were given a further $2,000 to their initial $2,000 investment budget. A total of 150 ideas were fully funded and moved forward for implementation.

According to Barbara Mathers, Vice President, CIOLab, IBM Office of the CIO, who was in charge of the two latest campaigns in 2014, three major adjustments were made to iFundIT relative to previous versions: 1) the scale of the tool was further expanded to handle the volume, 2) the ideator- and investor-experience was improved and 3) a larger execution team was put in place, which handled and maintained the tool and executed the projects once they were successfully funded. Multiple iFundIT rounds resulted in a number of successfully funded projects; there were about a dozen projects from the 2013 iFundIT trials and half a dozen from the 2014 rounds deployed as of November 2014.

Ideators could be split into three distinct categories 1) technical, i.e. they could contribute to subsequent coding of the project, 2) non-technical but very familiar with the context in which the app was required, and 3) the “inbetweeners” or “power users” of mobile devices but with no specific coding skills. It is the first category of technically skilled ideators that IBM wanted to involve further in the implementation of successful projects.

Notable among the successfully financed projects was IBM Client Experience, a mobile app that allows employees to build a mock-up solution during a client meeting, as an alternative to PowerPoint. There were also some applications
potentially suitable for commercialization such as the Blue Dial Tag—a way of tagging business calls as opposed to personal calls on a mobile bill, which allowed users to itemize the bill before expensing it.

The iFundIT enterprise crowdfunding project has again proven to be a success. Its major outcomes were:

*Employees were motivated to participate for social rather than financial reasons*

According to Françoise LeGoues who ran the project during 2013: “The biggest impact so far has been cultural. People love it, because it makes their jobs more fun and gives them a chance to invent solutions for business problems that have been frustrating them.”

Barbara Mathers, in charge of the 2014 campaigns, reflected on the beneficial changes brought about the project: “iFundIT empowers employees to become entrepreneurs inside the company; it gives them the chance to contribute and receive the recognition they deserve. Enterprise crowdfunding increases employee engagement and collaboration. It increases employee power and flips the innovation-decision process upside down... enterprise crowdfunding allows you to shorten the decision-making process significantly and gives employees an instant gratification of seeing their projects from origination to deployment in a much shorter period of time.”

The employees were not the only ones to benefit directly from iFundIT. As Françoise LeGoues recalled,
the organization as a whole also reaped the fruits of crowdfunding: "Very often the employees thought that if we'd funded that technology, a lot of IBMers would use it and the CIO organization would look better. It was not necessarily for a profit but more because it would improve the reputation of the CIO organization and IBM."

Regarding the two iFundIT campaigns that ran across the whole of IBM in 2014, Barbara Mathers added: "The mobile apps make the employees' work easier and some even accomplish a specific business goal. Therefore employee effectiveness rose as a result of iFundIT, of which IBM directly benefited."

The iFundIT project generated a number of benefits for IBM. Participation rose with each conducted round. Employees appreciated having control over their decisions and over how their workplace was orchestrated. It represented a clear departure from the classic innovation-decision process and an improvement in employee-led innovation at IBM. It is now easier and faster for an employee to get their idea heard and to actually execute it. Employees also identified themselves with IBM, which improved corporate loyalty. It was easy to draw similarities between the crowdfunding initiative and IBM's corporate venture capital activities, as Françoise LeGoues explained: "All of the projects are intended to improve the way we do things internally. They address a variety of issues, from making the supply chain more efficient, to better sales tools, to internal apps for different uses."
**Distance-related frictions were diminished**

There was a small increase in probability that someone would fund a project if he or she was from the same country, culture, or division as the employee launching the project. However overall employees did cross these boundaries, in the sense of countries and working teams. This reflects the findings of broader research conducted by Agrawal et al. (2011), which concluded that crowdfunding platforms eliminate most distance-related economic frictions normally associated with seed- or early-stage financing. The platforms facilitate the acquisition of information, the monitoring of progress, and the possibilities of providing input. In the case of IBM, enterprise crowdfunding helped to strengthen a common identity and diminish departmental borders.

**Successful projects addressed collective concerns at multiple levels of the organization**

The project showed that there was slightly more benefit for employees at mid-management and operational levels. iFundIT changed the typical top-down decision-making process, where projects were approved by a review board. This speeded development up and projects were launched in a matter of weeks instead of months.

In the iFundIT project, about 70 percent of backers were originally unknown to proposers, although the former were able to access personal profile information about the latter. This suggests that employees were mostly pursuing organizational or commercial needs, as
projects often focused on improving the organizational environment and investment decisions reflected previously unsatisfied needs.

**Inclusive innovation**
According to Françoise LeGoues, corporate crowdfunding involved people who previously did not contribute to innovation. The organization has previously run project contests but not all employees participated. About ten projects were typically submitted following the launch of a contest, with a total of only fifty employees involved across all projects. In the crowdfunding campaign of 2013, all 6,000 employees of the CIO organization were told that they could register as investors and be allocated money, so that they could all fund innovation—a more than ten-fold increase in participation.

**Limitations and implementation issues**
The CIO organization has identified some issues to address before it runs its next enterprise crowdfunding campaign. Firstly, there was an upper limit on the number of investors, resulting in some employees not being able to register. Secondly, registered investors often did not spend all their budgets. Thirdly, the ideators or investors did not typically get involved in the actual deployment of projects. Unlike in traditional equity or reward-based crowdfunding, the implementation was handled by the IBM execution team. One way to increase investor and ideator participation in the implementation process would be for IBM to use a
reward scheme. However, it is hard to calculate the appropriate level of monetary reward for successful ideators and investors based on the incremental financial returns of the crowdfunded projects. An alternative would be for IBM to encourage ideators to include non-monetary rewards for investors more systematically in their projects. Finally, the employees did not get free time for proposing projects or investing. Any engagement by an employee in enterprise crowdfunding and conducting projects had to happen in addition to their usual workload, hence not everyone decided to participate.

IBM is a highly decentralized IT company at which most of the work is matrixed and virtualized. The question is whether enterprises with other organizational cultures or structures could benefit as much from enterprise crowdfunding as IBM did. However, according to both Barbara Mathers and Françoise LeGoues, it wasn’t the structure that was important but the type of employees—i.e. people willing to engage and try “new cool things.” They believe the process could be successfully deployed in any type of organization with a similar culture, especially for large companies where crowdfunding is perhaps the only way to achieve inclusive innovation. On this basis, enterprise crowdfunding might work just as well in a non-tech environment such as Walmart or McDonald’s, where employees like to be engaged and appreciate the chance to make a difference.

There is much to be learned from the way in which IBM has used crowdfunding as a new way to communicate and innovate inside the company. Many of the funded projects
succeeded and resulted in immediate benefits for IBM. They often began as internal tools which boosted the firm’s own efficiency, but they could also be sold later on as corporate products. Hence IBM might one day commercialize its crowdfunding platform and offer services to its clients as a white label.

By allowing any of its employees to be an innovator and creating a mechanism to push new ideas through to implementation, IBM has delivered a significant boost both to its level of innovation and to employee morale. Enterprise crowdfunding has proved to be a unique way for a large organization such as IBM to support small innovative projects.