Factors influencing post-hackathon project continuation in an African corporate setting

Zanele Ratsoga  
*Non-Resident Fellow, Institute for Pan-African Thought and Conversation (IPATC), University of Johannesburg*  
[https://orcid.org/0000-0002-3388-8689](https://orcid.org/0000-0002-3388-8689)

Mpho Primus  
*Associate Professor and Deputy Director, Institute for Intelligent Systems, University of Johannesburg*  
[https://orcid.org/0000-0002-5270-3619](https://orcid.org/0000-0002-5270-3619)

Abstract  
This article reports on a study examining the factors influencing post-hackathon project continuation in a company with presence in several African countries. The research was conducted as a case study, and focused on hackathon events held by the company between 2018 and 2020. The study identified three core factors that influenced the potential for project continuation after the corporate hackathons: (1) availability of financing; (2) team skills fit and diversity; and (3) degree of project integration into company operations. Where one or more of these elements was insufficiently present, then project continuation became less likely—and the likelihood of project discontinuation increased. The findings are of potential utility to corporate hackathon organisers seeking to increase the levels of project continuation—and, by extension, return on investment—from their companies’ hackathon projects.

Keywords  
corporate hackathons, hackathon projects, project continuation, project discontinuation, financing, skills, project integration

Acknowledgement  
This article draws on findings from first-listed author Ratsoga’s research in the Master of Management in Digital Business programme, University of the Witwatersrand (Wits), Johannesburg.

DOI: [https://doi.org/10.23962/ajic.i31.15564](https://doi.org/10.23962/ajic.i31.15564)

Recommended citation  
1. Introduction

Organisations operate in competitive environments and face constant pressure to provide innovative solutions in order to attract and retain customers. Innovation is the application of new technology (and information) to create a new product or service, requiring knowledge that has not previously been utilised to create the product or service in question (Afuah, 2020). The majority of innovations inside a firm or industry are the product of deliberate, purposeful searching for new ideas, which can be discovered through unexpected events, process demands, as well as industry and market developments (Drucker, 2002). Corporate hackathons have become one of the strategies that firms use to speedily develop prototypes which can turn into solutions providing value to customers (Herbsleb et al., 2018).

Hackathons are time-limited events centred around problem-solving and computer programming, with a focus on showcasing prototypes of digital innovations (Cobham et al., 2017). Corporate hackathons are aimed at generating innovative technological ideas, with the ultimate goal being to continue projects beyond the hackathon stage and to launch products that meet customer needs. Despite the many positive views on the usefulness of corporate hackathons, concerns have also been voiced about the lack of economic exploitation of many hackathon outcomes—with questions raised regarding the return on investment, in terms of finances and time, that firms receive from organising these events (Kohne & Wehmeier, 2020; Komssi et al., 2015; Medina & Nolte, 2020; Nolte et al., 2018, 2020).

A key potential return on investment for a corporate hackathon is project continuation, i.e., when participants in the hackathon are able to take forward the innovations they generated in the hackathon after the event. Accordingly, this study explored the factors that lead to post-hackathon project continuation, or non-continuation, within a corporate setting.

This article is organised as follows: Section 2 provides the background, including the literature review, on corporate hackathons and project continuation; section 3 presents the study design; section 4 presents the findings; section 5 discusses and analyses the findings; and section 6 presents conclusions and suggestions for future research.
Factors influencing post-hackathon project continuation in an African corporate setting

2. Background and literature review
The word “hackathon” is a fusion of two words: “hack” and “marathon”. It resembles a marathon in that effort is focused; but, in this case, the focus is on developing software to bring about a solution (Kohne & Wehmeier, 2020; Komssi et al., 2015). Hackathons are time-limited, problem-oriented computer programming events showcasing prototypes of digital innovation, where people meet and form teams (Lifshitz-Assaf et al., 2021). Each team tries to complete its chosen project of interest, usually within two to five days (Briscoe & Mulligan, 2014; Herbsleb et al., 2018). Hackathons connote the positive sharing of knowledge and the development of a prototype in a time-constrained and pressurised environment (Kohne & Wehmeier, 2020; Komssi et al., 2015; Pe Than et al., 2020; Raatikainen et al., 2013; Soltani et al., 2014). They encourage collaboration, creativity, and quick prototyping with the goal of generating new ideas and solutions (Briscoe & Mulligan, 2014). While hacking is sometimes associated with negativity and cybercrimes, in a hackathon setting it refers to an experimental programming event (Flus & Hurst, 2021).

Hackathons began in technology and programming communities with participants focused on creating software applications through coding in marathon-like settings (Briscoe & Mulligan, 2014; Falk et al., 2021). However these innovation-driven events can be conducted in either corporate, civic, or educational settings (Kienzler, 2016; Komssi et al., 2015; Leclair, 2015). The hackathon typology can also be categorised as innovation-searching of a community-nurturing, issue-oriented, or catalytic nature (Medina & Nolte, 2020). Significant adoption of hackathons emerged in the mid- to late 2000s in the form of competitive events that focused on driving product innovation, with higher prevalence at large technology companies and in university computing environments (Herbsleb et al., 2018).

Hackathons provide numerous short-term benefits for the organisers and participants. They create a platform for problem-solving, idea generation, and prototyping within a short period (Briscoe & Mulligan, 2014; Falk et al., 2021; Komssi et al., 2015). They encourage learning, collaboration, and networking among participants (Briscoe & Mulligan, 2014; Soltani et al., 2014; Tang & Vezzani, 2017). They also stimulate creativity and encourage a culture of innovation (Herbsleb et al., 2018; Kohne & Wehmeier, 2020). Even while these short-term benefits may be quite clear, the long-term impacts and sustainability of hackathon projects are less certain and require interrogation (Medina & Nolte, 2020; Nolte et al., 2020).

Corporate hackathons
Companies in this highly competitive age have been forced to seek innovative ways to decrease the duration of product development cycles (Herbsleb et al., 2018). Corporate hackathons are therefore designed to deliver innovation, new products, and new ventures, and corporates set aside considerable budgets to fund these initiatives as sources of competitiveness (Kitsios & Kamariotou, 2019). Through hackathons,
ideas can be generated, and revenue-making prototypes developed, which answer fundamental problems facing organisations (Komssi et al., 2015). Nolte et al. (2020) report that roughly one-third of all hackathons occur in the corporate space.

Studies have shown that corporate hackathons can encourage effective idea generation, problem-solving, and cross-functional collaboration within an organisation (Herbsleb et al., 2018; Kohne & Wehmeier, 2020). The success of corporate hackathons should be assessed not only on the basis of immediate results, but also on the extent to which they meet the challenge of converting hackathon projects into actual products or initiatives that can deliver value to an organisation (Leemet et al., 2021; Nolte et al., 2020; Pe Than et al., 2020).

In their systematic literature review of 29 peer-reviewed journal papers and 62 peer-reviewed conference papers, Medina and Nolte (2020) identify two types of tangible outcomes, and five types of intangible outcomes, from hackathons:

- **Tangible outcomes**
  - technical artefacts (e.g., new prototypes, product features, bug fixes), and
  - non-technical artefacts (e.g., visualisations, new or improved documentation, publications).

- **Intangible outcomes**
  - learning (e.g., about a hackathon, new technology, new industry),
  - networking (e.g., meeting new people, more opportunities to collaborate),
  - interdisciplinary collaboration (e.g., creative ideation),
  - entrepreneurship, or fostering existing enterprises, and
  - fostering awareness about hackathon theme (Medina & Nolte, 2020).

Medina and Nolte (2020) find that entrepreneurial, long-term, post-hackathon project continuation requires both tangible and intangible outcomes working in tandem.

**Post-hackathon project continuation**

Post-hackathon project continuation refers to activities occurring after the hackathon event that further develop the hackathon idea or prototype, ideally into a product or start-up that can be launched into the market. Many studies of hackathons have focused on the preparation and operational aspects of the events themselves (Briscoe & Mulligan, 2014; Falk et al., 2021; Komssi et al., 2015; Soltani et al., 2014; Stoltzfus et al., 2017). In contrast, there has been relatively little focus on project continuation and achievement of sustained outcomes—with notable exceptions being the work of Leemet et al. (2021), Medina and Nolte (2020), Nolte et al. (2018; 2020), and Pe Than et al. (2020).
Due to the short and intense nature of hackathons, there is a risk of post-hackathon activities being neglected or abandoned (Flores et al., 2018). Komssi et al. (2015) found that, in the overall assessment of a hackathon event, the organisers, participants, audience members, and stakeholders typically rate the event as quite successful, irrespective of the degree of scaling of ideas generated at the hackathon.

According to an archival analysis of the hackathon database Devpost2, which primarily includes hackathons open for anyone to participate in, only 5% of all types of hackathon projects remained active after five months (Nolte et al., 2020). These low project continuation rates were found to be present regardless of whether the hackathon event was positioned as individual learning, community-building, or entrepreneurial opportunity (Nolte et al., 2020). Findings such as these lead to the argument that hackathon outcomes are typically not sustained beyond the hackathon event (Cobham et al., 2017; Mantzavinou et al., 2018; Trainer et al., 2016).

In their analysis of a hackathon database, Nolte et al. (2020) identified nine elements found to influence project continuation. These are team size, team familiarity, prior hackathon participation, skill matching, skill diversity, preparation activities, continuation intention, project complexity, and winning the hackathon. The Nolte et al. (2020) study also found that having smaller teams, team member familiarity with each other, and prior participation in a hackathon all result in a better chance of post-hackathon project continuation. They further found that long-term project continuation is supported where teams have a good skill fit, diverse skill sets, and a strong intention to continue the project.

Also regarding elements that can influence project continuation, the Nolte et al. (2018) study found that consultations with potential stakeholders before and during the hackathon event create awareness that positively contributes to project placement and financial sponsorships. Also, companies that implement structured post-hackathon activities, such as conducting lessons-learned sessions, assessing ideas, and reflecting on prototypes developed during the event, have been found to generate returns on hackathon investment (Flores et al., 2018; Kohne & Wehmeier, 2020). Further to such activities, determinations then need to be made regarding ideas to be further pursued or discarded, and budget allocations can then be provided for ideas that are assessed to have potential (Komssi et al., 2015).

Our study was of an exploratory nature, focused on determining the factors that influence post-hackathon project continuation. Nevertheless, it relied on the baseline provided by the literature review findings, and aimed to contribute to the existing body of knowledge.
3. Study design
Semi-structured interviews were conducted, from November 2021 to February 2022, with 20 hackathon participants across the company’s operations in six African countries. Permission was sought and granted by the company’s hackathon organisation team to conduct the research and to obtain access to the database of all hackathon participants within the company. Participants were each invited to participate via an email in which the context of the study was laid out. The data was collected using semi-structured interviews targeted at participants who took part in hackathons held from 2018 to 2020. The selection of the participants targeted both instances where there was post-hackathon project continuation and where there was no continuation.

The majority of the participants were based in South Africa, representing 50% of the study sample. This was followed by the DRC and Kenya, each with 30% representation, Lesotho with 10% representation, and Mozambique and Tanzania each with 5% representation, as represented in Figure 1 below.

Figure 1: Number of participants, and percentage of study sample, per country
The South African office of the company chosen for the case study had more employees than the offices in the other African countries, resulting in the South African office having a larger representation of participants who were interviewed. In the study’s findings and analysis, the participants’ views were found to be similar across all the country locations, i.e., no significant country-specific differences were identified.

An interview guide (see Appendix) was used, containing questions grounded in the literature reviewed as well as other specific questions that we devised. Because the guide was semi-structured, it allowed for probing based on the responses received. As seen in the Appendix, the guide comprised an introductory section with three questions, and then three core sections containing a total of 14 questions. The first section gathered information on the participants: length of service in the company, position in the company, and number of hackathons participated in. The remaining three sections focused on:

- motivations for participation, and project continuation intent;
- project continuation; and
- project discontinuation.

The semi-structured interviews were conducted over Microsoft Teams and audio-recorded, with the participants first consenting to the recording. Each recording was transcribed word-for-word and then subjected to thematic analysis. The identified themes were mapped and interpreted according to the research focus on the factors influencing post-hackathon project continuation or discontinuation.

4. Findings

Status of the 20 hackathon projects

Each of the 20 interview participants was involved in a separate hackathon project, meaning that the study examined the dynamics of post-hackathon continuation and discontinuation with respect to 20 projects. One of the questions in the interview guide asked whether the project was:

- implemented (“completed” in the wording of the interview guide);
- in progress; or
- abandoned.
Table 1 represents the status of the 20 participants’ projects, as well as each participant’s country and hackathon year.

**Table 1: Status of the 20 hackathon projects as at February 2022**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Project status</th>
<th>Country</th>
<th>Year of hackathon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 2</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 3</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 4</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 5</td>
<td>implemented</td>
<td>South Africa</td>
<td>2018</td>
</tr>
<tr>
<td>Participant 6</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 7</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 8</td>
<td>in progress</td>
<td>South Africa</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 9</td>
<td>abandoned</td>
<td>South Africa</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 10</td>
<td>in progress</td>
<td>South Africa</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 11</td>
<td>abandoned</td>
<td>DRC</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 12</td>
<td>abandoned</td>
<td>DRC</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 13</td>
<td>abandoned</td>
<td>DRC</td>
<td>2019</td>
</tr>
<tr>
<td>Participant 14</td>
<td>in progress</td>
<td>Mozambique</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 15</td>
<td>implemented</td>
<td>Kenya</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 16</td>
<td>abandoned</td>
<td>Kenya</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 17</td>
<td>in progress</td>
<td>Kenya</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 18</td>
<td>abandoned</td>
<td>Lesotho</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 19</td>
<td>implemented</td>
<td>Tanzania</td>
<td>2020</td>
</tr>
<tr>
<td>Participant 20</td>
<td>abandoned</td>
<td>Lesotho</td>
<td>2020</td>
</tr>
</tbody>
</table>

Among the 20 projects, it was found that 13 (65%) had been abandoned, four (20%) were still in progress, and three (15%) were already implemented. Figure 2 represents the project status by country.
Motivations for hackathon participation
The motivations for hackathon participation that were most frequently cited by the interview participants were:

- to develop solutions;
- to develop something that could be implemented by the company;
- to contribute to the company’s culture of innovation;
- to be part of the hackathon, which was something new;
- to have fun;
- to win the hackathon and be rewarded with money.

These motivations are reflected in the following participant statements:

**Participant 2**: “To really sell a solution that is alternative to day-to-day thinking […] and creating a culture of innovation in my own team. So that was really the driver.”

**Participant 3**: “To be [a] solution provider [for] the issues that we as the Fraud Department had at that time.”

**Participant 15**: “[…] the culture of innovation, the culture of experimenting with new ideas, and the culture of using technology to solve everyday problems.”
Participant 19: “My intention, basically, [was that] I wanted to have something which I can see working in the market and impacting the lives of people but also bringing revenue to company.”

Participant 14: “Seeing that idea winning, and the people liking that idea, and this idea being implemented within the organisation.”

Participant 3: “That first time experience and the vibe and interacting with other people.”

Participant 5: “It was the first time the organisation was hosting a hackathon, so I just also wanted to be part of the hackathon. I did not really know what the hackathon was all about, but I just wanted to be part of it.”

Participant 9: “To have fun and see if we could win the prize money.”

Participant 3: “Win the hackathon and [see] our idea being implemented within the organisation.”

Participant 16: “I think the prize money was of course a big motivation.”

Participant 18: “Of course money held more weight as an incentive than the other things, because I mean, hey, we live in a world where money moves everything, so it was one of the things that ticked my box to enter the hackathon.”

Project continuation intentions
As seen above in the findings on motivations for hackathon participation, several of the interviewees had clear project continuation intentions when entering the hackathon. Across the interviews, the key project continuation intentions were:

- introduction of a new, or enhancing an existing, business process/product;
- having the new or enhanced offering implemented in the company; and/or
- seeing the new enhanced offering being “live in the market”.

The following are additional examples of participant statements on project continuation intent:

Participant 1: “The intention was to improve the current processes to a better process that will benefit both users and customers.”

Participant 7: “Improve customer experience by improving the business process, and also, if we improve the customer experience by streamlining the business process, we will therefore avoid unnecessary calls coming into the call centres.”

Participant 2: “Seeing our idea being implemented within the organisation.”

Participant 11: “Bring our project to life.”

Participant 16: “Seeing [our] product live in the market.”
Factors influencing post-hackathon project continuation
In the participant interviews, the three factors most frequently cited as influencing whether or not a hackathon project would continue post-hackathon were: (1) availability of financing; (2) team skills fit and diversity; and (3) degree of project integration into company operations. Figure 3 provides a visualisation of the three main factors found to influence project continuation.

Figure 3: Factors influencing post-hackathon project continuation

Availability of financing
In order for their projects to continue post-hackathon, the participants were required to source funds that could be allocated to their projects, as the organisation had not made funding automatically available for post-hackathon project continuation. Several participants stated that it was challenging to continue working on their projects without an allocated budget, with the projects typically being placed on a backlog list while the focus was on other projects.

Participant 2: “The cost implication you’re going to be carrying on your own, and it became clear that the executives were more interested in investing in those hackathon ideas that had won and took ownership on those.”

Participant 8: “The item was in the backlog [of company initiatives], but we could not get traction because the focus was on other things.”
Participant 7: “There was no budget from the hackathon team to have us seconded […] or any support to help us influence and implement a solution. In literal terms it meant our efforts were at a standstill.”

Participant 8: “It would have been great if there was a budget support because I tell you what, that would have accelerated our efforts. We would have scaled up very quickly.”

Participant 10: “It would have been a lot easier if there was separate budget for more resources allocation to look at some of the technical challenges and also some of the business requirements analysis and things like that.”

**Team skills fit and diversity**

Several interview participants spoke of the importance, for post-hackathon project continuation, of having selected a team with appropriate skills fit and diversity for the project both during and after the hackathon. Some participants said they discovered that while they may have had the appropriate skills for the project at the hackathon stage, the same team was not fit for post-hackathon project continuation.

Participant 6: “We would have needed a broader team to take the idea through. […] the skills that we had were sufficient for the hackathon, but in terms of implementation, we needed other people involved.”

Participant 13: “I think that we underestimated the challenge of the implementation of our own idea.”

Participant 17: “Actually I think it was luck or something, but I think I got the best team for [the hackathon]. Now, for implementation, probably I will say [I] just need an additional resource.”

One participant, participant 19, said their team was able to successfully pursue project continuation primarily because the implementers were part of the hackathon team:

Participant 19: “Taking it live was very simple, because the same people whom I picked were already working within the same systems.”

**Project integration**

Many interview participants pointed to the importance, for project continuation, of finding ways to ensure that their projects could be integrated into the company’s systems and processes. The participants highlighted the need for their direct leadership to support and prioritise the continuation of their hackathon projects, and the challenges posed when there was an absence of such support and prioritisation. The participants spoke of difficulties in getting prioritisation for their projects,
Factors influencing post-hackathon project continuation in an African corporate setting

resulting in some of the projects being abandoned or taking longer than anticipated to progress to implementation. The following are some of the statements made:

**Participant 6:** “Had our manager been also keen on it, there would have been more fight from them in terms of fighting with the other systems to make sure that this thing goes into production. So, to sum it up, I would say management [...] should be as committed as the people that were involved in the hackathon about the idea.”

**Participant 10:** “Prioritisation for the project was an issue because there were other high-impact projects that took precedence.”

**Participant 13:** “I think we could have had more support in terms of accompanying us to implement the project. So the one thing is the pressure on ExCo [Executive Committee] level. Another thing is support to us, to the team, for each level of implementation of the project, which wasn’t done.”

**Participant 13:** “[At] ExCo level, it’s not a problem of understanding, but it’s a problem of priority. They just did not push for it because they did not feel the pressure to do so.”

Participant 8 said that the prioritisation success achieved by their project was due to the fact that the company’s Chief Risk Officer (CRO) had an interest in it:

**Participant 8:** “Our idea had a lot of buy-in from our ME [Management Executive]. To start with, he bought into the idea. It also had a buy-in from the CRO, the head of Fraud and Risk. The fact that it had buy-in from that higher-up meant that it received a lot of impetus and momentum, so we could […] proceed.”

Some participants highlighted the problem of similar ideas co-existing within the company, and these overlaps only being discovered once project continuation had commenced. For example, participant 5’s team discovered that another team within the company had already progressed with a project with similar elements. Ultimately, the teams collaborated towards project continuation, which resulted in a completed project.

**Participant 5:** “So when we presented the idea, we realised there was another team that had sort of the similar ideas […] although not exactly the same. So, bits and pieces of our ideas. We took some of the ideas from the other team and we sort of fused them together.”
However, for participant 9’s team, overlap with an existing project meant that their project became unnecessary and had to be abandoned.

Participant 9: “[A project similar to ours was] already being started by a different group that we weren’t aware of, and they actually finished it.”

Participants also spoke of project integration problems posed by lack of readiness in the company to work with certain new technological elements.

Participant 2: “There was no appetite to explore blockchain, or invest in any blockchain, because of a lack of understanding and no sort of use cases that [were] known before.”
Participant 3: “The technology [used by our project], at that time, was new to [the] organisation. There were not a lot of systems that were running on the new technology. So basically, to the company [our project] was […] going to be a Capex expense.”
Participant 8: “So there [were] some architectural [elements] that were promised to be in existence that we needed to conform to, and as development went by, we quickly discovered that [the technology] stack was not ready.”
Participant 14: “[Our project required an] enabling or creating [of] capability within the team for machine-learning. […] maybe after this capability [is] in place within the organisation, [our] idea can be implemented.”

Participant 19, whose team’s project had been partially implemented, spoke of the difficulty of integrating into both new and old products.

Participant 19: “The way the project was, we wanted to touch […] several products. We were planning to add value [to almost] all products [the company has], but now the challenge was how to integrate with some old products. So, we had to start with only a few. I think we started dealing with like three products out of like 20-plus products. Which we have now. So, due to integration challenges we had to start with those products which were straight away and simple to do.”

Another barrier to project integration at the company, according to participant 7 (whose project had been abandoned), was the absence of centralised repositories for
sourcing the latest data and process documentation necessary to enable hackathon teams to confidently pursue project continuation.

**Participant 7:** “There’s a lack of benchmarked, centralised systems, which makes it very difficult to source the right type of data. You might think you have the right type of data, but […] it probably is not the latest updated data or the most comprehensive data that covers the problem conclusively. […] Documentation of those systems and processes is very lacking, right, so it makes innovation a bit hard because you have to dig really deep. You literally cannot trust that the process that you’re looking at is the correct flow of data.”

Participant 10, whose team’s project had successfully continued beyond the hackathon and was still in progress, said his team’s success was due to intentionally re-using existing technology capabilities.

**Participant 10:** “[We re-used] some of the existing capabilities […] existing technology, in terms of how the model gets built and exposed. So [we are] just re-using technology that’s been used on other use cases.”

Participant 19, whose team’s project had been partially implemented, said the key to their success was adding value to something that already existed, not proposing something entirely new.

**Participant 19:** “[Our project adds] value to existing products so that customers can be attracted to […] purchase the product with the extra value added.”

5. **Discussion and analysis**
We now discuss and analyse some of the key lessons that emerged from this study’s findings.

**Availability of financing**
Budgets need to be made available for the deployment of corporate hackathon projects that require integration into a company’s systems, especially in the case of hackathon projects that involve the use of technology in building prototypes. In the company studied, the hackathon organisers did not allocate any funding to the projects, but rather left it to the participants to seek funding through their own efforts. The hackathon organisers thus anticipated that participants’ business units
would budget for the deployment of these projects. Consequently, where there was an absence of budget allocations, the projects could not continue after the hackathon and were ultimately abandoned.

In the company that we studied, there was no indication that systematic determinations were made regarding which projects should be pursued. Where the teams had consulted potential stakeholders within the company before and during the hackathon, those projects tended to find financial support and opportunities for integration within the organisation. Therefore, project continuation was greatly dependent on whether the team had secured sponsorships prior to the hackathon event.

**Team skills fit and diversity**

For a corporate hackathon project to have potential for success, its team needs to possess the skills appropriate to, and sufficiently diverse for, both the hackathon itself and the subsequent process of taking the project forward within the company. In the case studied, the value of appropriate skills was made particularly evident by the experience of the hackathon team that was made up of system developers who were already working on the systems to be impacted by the hackathon project—making project continuation after the hackathon event quite straightforward. This study’s findings on the importance of skills fit and diversity align with the conclusions reached in the Nolte et al. (2020) study mentioned above.

**Project integration**

In this study, it was found that projects requiring new technology tended to be discontinued due to the realisation that the organisation was not able, or willing, to invest in a new untested technology with unknown business cases. The projects that were most easily continued were those adding value to existing products or re-using existing technology with known use cases. These findings align with conclusions drawn from studies that found that teams who had built prototypes that could be incorporated into current products had a strong likelihood of continuing to work on their projects after a hackathon (Herbsleb et al., 2018; Komssi et al., 2015). This study found that project integration also relied to a great extent on management commitment. Many participants found that, for a variety of reasons, management commitment was difficult to secure. These findings on the importance of corporate commitment to project continuation align with what Leemet et al. (2021) found in their study cited above.
6. Conclusions and potential future research directions

This study’s key contribution to the body of knowledge on corporate hackathons is its identification of three core factors influencing post-hackathon project continuation: (1) availability of financing; (2) team skills fit and diversity; and (3) degree of project integration into company operations. Where one or more of these elements is weak, then the chances for project continuation decrease—and, by extension, the likelihood of discontinuation increases. These findings can potentially empower corporate hackathon organisers who seek to increase return on investment on hackathons through increased levels of continuation—leading to successful implementation—of hackathon projects.

This study’s findings also suggest potential directions for future research that could be of use to corporate hackathon organisers. One area that could benefit from future research is the relationship between hackathon participants’ continuation intentions and their actual continuation behaviour. A deeper understanding of this relationship could enable hackathon organisers to identify hackathon participants who, with the right support, would be most likely to continue the necessary work to deliver on the promise of a functioning product or service solution. Another area that could benefit from study would be the feasibility of requiring all hackathon teams to have, in advance of the hackathon, an in-principle commitment from an internal organisational business unit, prior to the event, that the project will receive priority appraisal, after the hackathon, regarding its potential for development for integration into the company’s operations (Falk et al., 2021).

References


Appendix: Interview guide

Section A: Participant information
a) How many years have you worked in [name of company]?
b) What is the division/functional area and country that you work in?
c) How many hackathon events have you participated in at [name of company]?

Section B: Project continuation intent
1. What was your motivation and intention to participate in the hackathon?
2. How did you and your team prepare for the event, including systems or processes the project would be impacted by?
3. Did you have intentions of working on the project post the event? Why?

Section C: Post-hackathon activities – project continuation
4. Did the organisers provide any guidelines or terms of project continuation? What were those?
5. Do you believe your team had the appropriate skill fit and diversity for the chosen project? Why?
6. Did you encounter any challenges while working on the project? (system/people/processes/budget constraints?)
7. What are the specific activities that contributed to project continuation?
8. Were you required to provide regular project progress status to the organisers?
9. Is the project completed or still in progress or abandoned?
10. If abandoned, what other challenges did you experience?
Section D: Post-hackathon activities – project discontinuation

11. What is the reason for not continuing?
12. What challenges did you encounter that discouraged project continuation? (system/people/processes/budget constraints)
13. Do you feel that there’s something that could have been done to encourage project continuation?
14. Will you be participating in the next event? Why?