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DISCOVERING SOURCES AND APPROACHES IN FINANCING HACKATHONS

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Abstract

This study explores the diverse sources and approaches to financing hackathons, aiming to compare financing models for hackathons, emphasizing the influence of event type on various strategies. Employing an ethnographic approach, the research identifies three primary financing strategies-challenge-oriented, community-oriented, and profit-oriented and six key sources, including sponsorships, community contributions, self-funding, grants, investments, and registration fees. The findings reveal that aligning financing with hackathon objectives is essential for the overall performance of the event. Challenge-oriented hackathons require dedicated budgets, community-oriented ones rely on local support, and profit-oriented events must balance financial goals with inclusivity. Sponsorships and partnerships emerge as the most versatile funding method. The study underscores the importance of combining multiple financing sources to ensure resilience and stability. It contributes to the academic understanding of hackathon financing and offers practical insights for organizers, sponsors, participants, and policymakers, aiming to enhance the effectiveness and impact of hackathons in fostering innovation and collaboration.

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Introduction

Hackathons have emerged from their origins in the information technology (IT) sector to become versatile platforms for innovation across a wide range of industries (Briscoe & Mulligan, 2014; Medina et al., 2020). Originally conceived as intensive coding events where software developers collaborated to create solutions within a short timeframe, hackathons have evolved to address challenges in diverse fields such as medicine, education, banking, defense, and civic engagement (Heller et al., 2023; Trainer et al., 2016). This broad applicability has transformed hackathons into a popular tool for fostering creativity, collaboration, and rapid problem-solving.

The versatility of hackathons has led to their adoption by a wide array of organizations, each with unique objectives. For instance, some hackathons result from the desire to solve specific challenges faced by corporations or public institutions. These events often focus on creating practical solutions that can be immediately implemented to improve processes or address critical issues. On the other hand, community-oriented hackathons aim to foster innovation within a particular group, encouraging local talent to develop new ideas and technologies that can benefit the community (Rys, 2021).

As hackathons become more prevalent, understanding the diverse sources and approaches to their financing becomes crucial. The question of how these events obtain funds is essential as it influences the scope and scale of hackathons. Different organizations, each with distinct goals and resource availability, adopt varied approaches to finance hackathons, reflecting their specific motivations. For instance, while some events are funded through corporate sponsorships or governmental grants, others rely on community contributions or participant fees.

The significance of financing in hackathons

The financial aspect of hackathons plays a critical role in shaping the nature and outcomes of these events. Adequate funding is essential for ensuring the success of a hackathon as it directly affects various elements, including logistics, participant experience, and overall satisfaction of participants. This, in turn, may influence-both positively and negatively-the quality of the projects developed (Rys, 2022).

First of all, financing determines the availability of necessary resources and infrastructure for a hackathon. This includes securing a suitable venue, providing high-speed internet, procuring hardware and software tools, and ensuring the availability of essential amenities such as food and beverages. Well-funded hackathons can afford different facilities, which may affect the participants' productivity and comfort, thereby fostering a more (or less) conducive environment for innovation (Perng et al., 2018).

Second, the level of funding influences the ability to attract diverse and more skilled participants. Offering attractive incentives such as cash prizes, rewards, internships, scholarships, and opportunities for further development may draw skilled developers, designers, and innovators to the event. Additionally, providing travel grants and accommodation can make the hackathon accessible to a wider audience, including people from different geographical regions or underrepresented groups (Paganini & Gama, 2020).

Moreover, adequate funding allows for the provision of mentorship, workshops, and additional support that can significantly enhance the quality of the projects developed during the hackathon. Access to expert advice and specialized training can help participants refine their ideas and develop more suitable and impactful solutions (Nolte et al., 2020). Also, well-funded hackathons are able to offer post-event support, such as incubation programs or seed funding, to help promising projects transition from concept to reality (Dehli, 2016; Medina et al., 2020; Nolte et al., 2020).

Additionally, financial resources are crucial for effective marketing and promotion of the hackathon. A well-publicized event can attract media attention, increase participant numbers, and draw the interest of potential sponsors and partners. This, in turn, can amplify the hackathon's impact by ensuring that the solutions developed reach a broader audience and potentially attract further investment or support (Nolte et al., 2020).

Furthermore, sustainable funding models are essential for the long-term success and continuity of hackathons. Reliable financial backing enables organizers to plan and execute recurring events, thereby building a community to help tackle future challenges and foster ongoing innovation (Trainer et al., 2016). Sustainable financing also ensures that hackathons can adapt to changing circumstances and continue to provide value over time.

Last but not least, while financing is critical, it also presents several challenges. Organizers must balance the need for adequate funding with the desire to keep the event accessible and inclusive (Falk et al., 2022). In addition, they must navigate the complexities of securing and managing funds from various sources, including corporate sponsors, community contributions, and grants. Effective financial management is key to ensuring efficient and transparent utilization of resources, thus maintaining the trust and support of stakeholders.

Understanding the significance of financing in hackathons provides a foundation for exploring the

diverse sources and approaches to securing funds for these events. The results will help understand and explore specific funding models and approaches, shedding light on how different organizations navigate the financial landscape to support successful hackathons.

Research gap

Despite the increasing popularity and diverse applications of hackathons, and the proven importance of understanding the financial sphere, there is a noticeable gap in the literature regarding the financial mechanisms that support these events. While many authors have written about the social and technical aspects of hackathons (Brooke, 2018; Irani, 2015; Trainer et al., 2016), the financial strategies and their impact on the success and sustainability of hackathons remain underexplored. Most of the existing studies focus on the immediate outcomes of hackathons, such as innovation output and participant engagement, but do not delve deeply into how different funding approaches influence the direction and outcomes of hackathons (Falk et al., 2022).

This article aims to address this gap by systematically categorizing and analyzing the various sources and approaches to hackathon financing. It identifies and compares different models of financing hackathons, with particular emphasis on how the type of event influences financing strategies. By describing and examining these topics, this research provides valuable insights into the financial dynamics that underpin these events. Additionally, it explores the implications of these financial strategies on the overall structure of particular hackathons, expanding the academic research and offering practical guidance for organizers and stakeholders. By filling this gap, the article not only contributes to the academic understanding of hackathon financing but also provides actionable knowledge for practitioners looking to optimize their funding strategies to achieve better results and greater impact from their hackathon initiatives.

Methodology

This research employs an ethnographic approach to explore the various sources and approaches to financing hackathons. Ethnography, traditionally used in anthropology and sociology, involves the systematic study of people and cultures from the subject's point of view. In this context, the ethnographic method is adapted to study the practices, interactions, and financial strategies of hackathon organizers and participants.

The ethnographic approach was chosen for its ability to provide a comprehensive view and a deep, nuanced understanding of the cultural and organizational dynamics at play in hackathon financing. This method involved immersive participation and observation at various hackathons, complemented by interviews with organizers, sponsors, participants, and other stakeholders. The following steps outline the ethnographic process used in this research:

- Hackathon Stakeholders Observation: The researcher took part in over 20 different hackathons in all forms-hybrid, online, and stationary, dedicated for various groups, organized over few years and in various geographical locations-actively participating in events to observe firsthand the interactions and financial transactions occurring. This involvement provided an insider's perspective on hackathon financing and the roles different stakeholders play in this process as organizers, participants, partners, sponsors, various intermediaries, or service providers.
- Interviews: The study included semi-structured and unstructured interviews with a diverse range of stakeholders, including corporate sponsors, community organizers, governmental representatives, and participants. These interviews aimed to uncover detailed information about their motivations, challenges, and strategies related to hackathon financing.
- Document Analysis: The researcher collected supplementary data through the analysis of relevant documents, such as funding proposals, sponsorship agreements, promotional materials, and available financial reports. This helped triangulate the findings from observations and interviews.
- Field Notes: Detailed field notes accompanied the entire research process to capture observations, reflections, and insights. These notes served as a critical data source for analyzing the financing approaches and their implications.
- Netnography: The study included online research to examine the available online documents, such as reports, analyses, and data from hackathons that took place in the past.

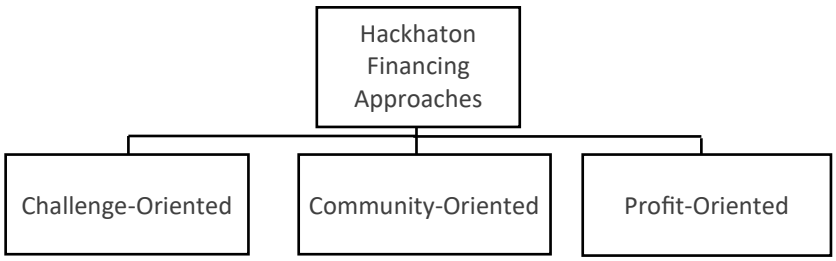
Results

The analysis of the gathered material reveals that there are various sources and approaches to financing hackathons. Organizations have different goals and profiles, which leads to diverse financing strategies. However, three primary approaches and six notable sources stand out (summary provided in Figure 1):

- Challenge-Oriented (Organization-Oriented): These ha -ckhatons' typical organizers include specific entities such as corporations, governmental bodies, public institutions, or NGOs. Their main objective is to address a particular challenge faced by the organization or within their interest. While the goals may vary, the organization allocates a budget to conduct the hackathon without the primary intention of making a profit, although generating profit may be a secondary outcome (e.g. if other commercial partners decide to join and sponsor such an event). About half of all observed hackathons followed this approach.

- Community-Oriented: These hackathons usually operate at zero or near-zero cost. They are financed by the community, which includes individuals associated with certain organizations who contribute to covering the cost of the entire hackathon or its specific parts, such in the case of Smogathon 2015. Although profit is not the primary aim, the entity responsible typically reinvests any surplus into future events or its other activities. About a quarter of all observed hackathons followed this approach.
- Profit-Oriented: This category includes hackathons organized for profit, often by professional organizations or event agencies specializing in these events. These can be standalone hackathons or recurring series, such as HackYeah, celebrating its 10th edition in 2024. About a quarter of all observed hackathons followed this approach.

Figure 1: Hackathon Financing Approaches



Source: Author's own elaboration.

Afterwards, the researcher identified six financing sources, repeatedly observed at various hackathons (summary provided in Figure 2):

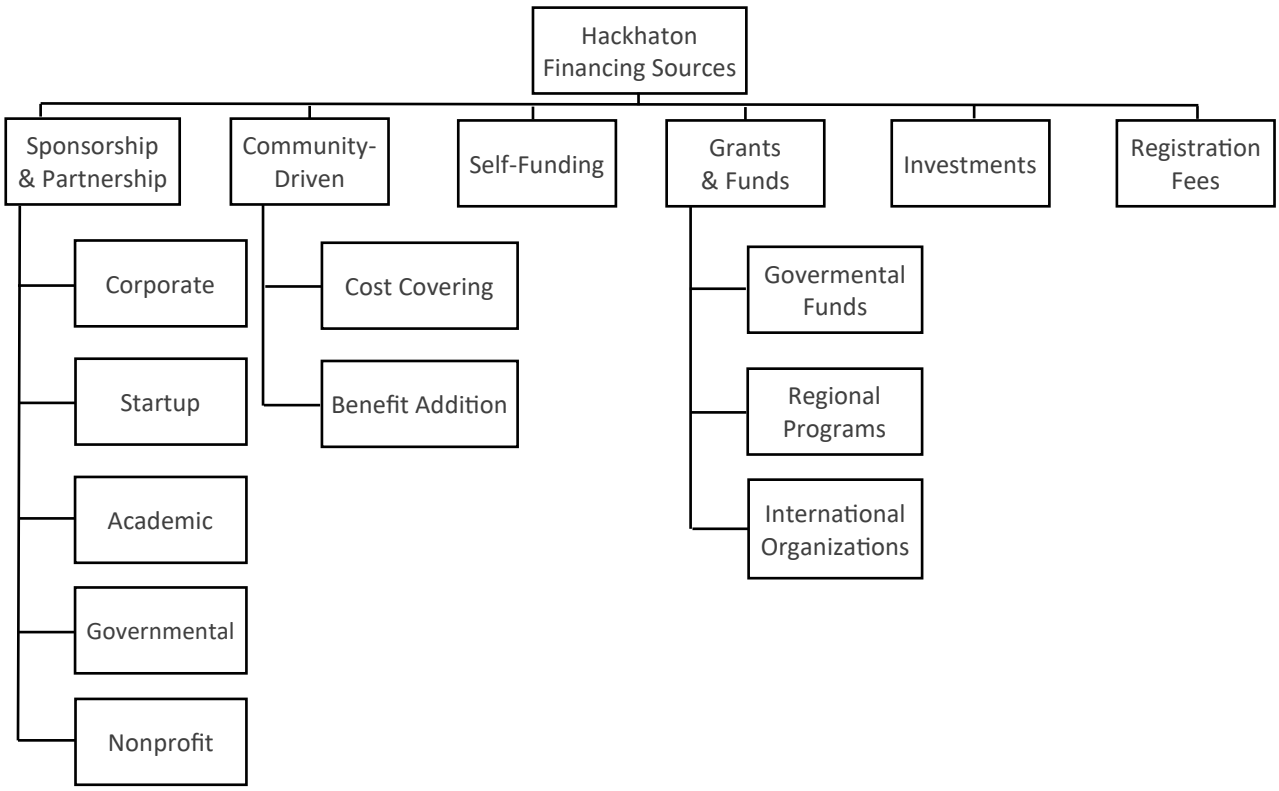
1. Sponsorships and Partnerships: This is the most popular and common method of financial support for hackathons, used by all community and profit-oriented hackathons and the vast majority (all but one) of challenge oriented hackathons, which were studied for this research. After all, many organizations seek specific benefits that will fulfill their goals, such as gaining brand recognition, acquiring innovation, building awareness, recruitment, or public relation activities. That is why organizers often decide to sell sponsorship packages that include various benefits, such as:
   - Title of the Strategic Partner/Sponsor,
   - Opening and welcoming remarks by the Partner's representative,
   - Information about the Partner on the event's social media pages,
   - Logo publication on the event website,
   - Possibility of hosting workshops, lectures, or panel discussions during the event,
   - Providing mentors at the event.

   Depending on the hackathon's specifics, organizations choose different benefits to satisfy their needs and maximize their return on investment, while organizers try to maintain a delicate balance between participants' and partner/sponsor's satisfaction.
2. Community-Driven Sources: Depending on the hackathon's approach, communities, organizations, institutions, or groups of enthusiasts can offer support-either in cash or in kind. Those are usually small events below 50 people, but they can achieve a much larger scale, such as AGHacks for over 500 participants, organized in 2015. A special community-driven method is crowdfunding, which allows for direct yet voluntary financing of the event by participants and other contributors.
   Community support includes the following general categories:
   - Cost Covering: paying specific costs such as venue, catering, logistics, prizes, and hosting assistance,
   - Benefit Addition: adding value to the hackathon with extra prizes, special activities for participants, merchandise (like blankets, pillows, or hoodies), extra challenges, software tool access, speakers, or more mentors.
3. Self-Funding: This method is common for challenge-related hackathons, typically financed by organizations like corporations or governmental institutions with a dedicated budget for the event. Most of the studied hackathons obtained their financial covering through this method.
4. Grants and Funds: Some hackathons are part of a larger agenda or support global initiatives. Examples include the EUDIS hackathon on "Digital in Defence" organized by the European Defence Fund (EDF) Work Program in 2024, or the #EUvsVirus hackathon organized by the European Commission to tackle COVID-19 pandemic challenges. Application for such funds usually requires a formal procedure that may be inflexible and time-consuming, but this can offer stable and long-term development funds.
5. Investments: Certain organizations and individuals invest in hackathons to achieve long-term goals,

such as building a network or gaining contacts in a specific interest or geographical area. In these cases, hackathons serve as an intermediary method to reach broader objectives.

6. Registration Fees: While most hackathons are free, others charge a small fee from participants, as seen in some Startup Weekends worldwide. This fee usually covers catering, snacks, and venue preparation. However, it is important to note that registration fees have the reputation of a major deterrent for potential participants, as proved by research (Simonofski et al., 2020).

Figure 2: Hackathon financing sources



Source: Author's own elaboration.

Discussion and findings

The findings highlight the importance of aligning the financing approach with the hackathon's objectives. Challenge-oriented hackathons benefit from dedicated budgets that focus on solving specific problems, ensuring that resources are available to achieve high-quality and desirable outcomes. Community-oriented hackathons thrive on local engagement and contributions, fostering a strong sense of community but potentially facing technical and scalability issues. Profit-oriented hackathons, while financially sustainable, need to balance profitability with accessibility to avoid excluding potential participants.

Sponsorships and partnerships emerge as the most versatile and widely used method, capable of supporting various hackathon types. Community-driven sources and self-funding are vital for smaller, mission-driven hackathons but may require additional support to grow and expand. Grants and investments provide substantial funding and post-event opportunities but involve competitive application processes and often require time-consuming and overly formal procedures.

The reliance on registration fees presents a trade-off between financial viability and inclusivity, but it may have a negative influence of participants' motivation and recruitment for hackathons. Organizers need to carefully consider fee structures to maintain accessibility while covering the costs. The diverse sources identified underline the necessity for organizers to adopt a hybrid approach, combining multiple funding sources to ensure resilience and development, as relying on a single source may expose events to financial risks and limit their long-term viability.

Overall, the study underscores the critical role of financing in shaping the structure, accessibility, and outcomes of hackathons. Future research could explore the long-term impacts of different funding models, sector-specific adaptations, and the role of emerging tech-

nologies in hackathon financing. By understanding and optimizing these financial strategies, organizers can enhance the success and sustainability of hackathons, fostering innovation and collaboration across various domains.

Limitations and further research

While this research addresses the presented gap in understanding hackathon financing, several limitations remain. First, the sample size and diversity may not fully represent the global spectrum of hackathons, potentially limiting generalizability. Second, the ethnographic approach, despite its depth, introduces subjectivity and may not capture all the nuances. Third, the lack of longitudinal data restricts understanding of the long-term impacts of different financing models. Fourth, the research did not exhaustively examine the emerging technologies and trends in financing, or various contextual factors like the current economic environment or cultural norms. Addressing these limitations in future research can enhance the robustness and applicability of insights into hackathon financing, providing a more comprehensive understanding of both hackathon financing and its implications.

One area for further research is the comparative analysis of financing sources for technological and innovative ventures across different sectors. While this study focuses on the general landscape of hackathon financing, exploring how specific industries-such as healthcare, education, and fintech-adapt and implement financing strategies uniquely suited to their needs could reveal sector-specific challenges and best practices, providing targeted insights for organizers in various fields.

Longitudinal studies could also produce valuable insights into the long-term impacts of different financing models on hackathon outcomes. By tracking the progress of projects and participants over time, researchers can assess how initial funding influences project sustainability, participant career growth, and the broader innovation ecosystem. This long-term perspective could help identify which funding approaches are the most effective in fostering lasting innovation and entrepreneurial success.

Another promising area for research is the role of emerging technologies in hackathon financing. Technologies such as blockchain, AI, and IoT could potentially revolutionize hackathon funding, management, and execution. For instance, blockchain-based crowdfunding platforms may offer new ways to democratize funding, while AI tools could optimize resource allocation and participant matchmaking. Investigating these possibilities could uncover innovative financing solutions that enhance the efficiency and impact of hackathons.

Exploring alternative funding models such as public-private partnerships, social impact bonds, and cooperative funding initiatives may provide new avenues for supporting hackathons. Research could examine the feasibility and effectiveness of these models in different contexts, identifying opportunities for innovation in hackathon financing. This exploration could lead to the development of hybrid funding approaches that combine the strengths of various models to address diverse funding needs.

Finally, researchers could investigate the policy and regulatory implications on financing hackathons. Understanding how different regulatory environments affect hackathon funding and operation would help policymakers create supportive frameworks that facilitate innovation. Such research could also explore the role of government grants and incentives in promoting hackathons as tools for public good and economic development.

By pursuing these areas of further research, academics and practitioners can deepen their understanding of hackathon financing and its broader implications. Such findings would bring valuable lessons, contributing to the ongoing evolution of hackathons as powerful platforms for innovation and collaboration.

Practical implications

Understanding the diverse sources and approaches to financing hackathons has profound practical implications for organizers, sponsors, participants, and policymakers. For organizers, the insights gleaned from this research can significantly refine their funding strategies. By designing attractive sponsorship packages that align with corporate interests, organizers can secure substantial financial support while ensuring mutual benefits. Diversifying the funding sources is essential to create a robust and resilient financial model, thereby mitigating the risks associated with relying on a single source. This can include a mix of sponsorships, community contributions, grants, and participant fees. Engaging the local community through in-kind contributions and volunteer support can not only reduce costs but also foster a sense of local ownership and engagement. Furthermore, adequate funding allows organizers to enhance the participant experience by securing comfortable venues, providing quality amenities, and offering comprehensive resources such as high-speed internet and advanced hardware and software tools. The provision of mentorship, workshops, and post-event support can further improve the quality of projects developed during the hackathon.

Sponsors play a crucial role in the financial ecosystem of hackathons and can derive significant value from their involvement. By targeting hackathons that align with their strategic goals, such as talent acquisi-

tion, brand promotion, or specific innovation challenges, sponsors may achieve a higher return on investment. Active participation in hackathons through mentorship, workshops, and direct engagement with participants can strengthen brand presence and build positive relationships with potential future employees or collaborators. Finally, establishing long-term partnerships with hackathon organizers can provide continuous benefits, ensuring a steady pipeline of innovative solutions and maintaining a consistent presence in the innovation community.

For participants, understanding the financial dynamics of hackathons can also be highly beneficial. Awareness of how hackathons obtain funds will help participants choose events that offer the best resources and support, which in turn can enhance their productivity and project outcomes. Networking with the sponsors and mentors present during the hackathon provides valuable insights and connections that may lead to future career or business opportunities. Additionally, understanding the importance of financing in general can motivate participants to consider the long-term strategy of their projects, seeking hackathons that offer follow-up support such as incubation programs or seed funding to help their innovations progress beyond the event.

Policymakers can utilize the research findings to create an environment that supports innovation and collaboration through hackathons. Developing supportive policies, such as grants, tax incentives, or public-private partnership initiatives, could stimulate innovation and economic growth. Establishing clear regulatory frameworks will streamline the organization of hackathons, removing unnecessary barriers and promoting more frequent and diverse events. Policymakers can also support community-driven hackathons by providing resources such as venues, promotional support, and logistical assistance, thereby enhancing community engagement and driving local innovation.

By applying these practical implications, all stakeholders can contribute to the success and development of hackathons. This holistic approach ensures that hackathons continue to serve as vibrant platforms for innovation, collaboration, and societal impact, fostering an environment where creative solutions to complex problems can thrive and generate lasting benefits.

Conclusion

This research provides a comprehensive examination of the various sources and approaches to financing hackathons, highlighting the critical role that financial strategies play in the development of these events. By employing an ethnographic approach, the study identified three primary financing approaches-challenge-oriented, community-oriented, and profit-oriented and six distinct sources, including sponsorships and partnerships, community-driven sources, self-funding, grants and funds, investments, and registration fees.

The findings demonstrate the importance of synchronizing the financing practices with hackathon goals. Challenge-oriented hackathons, which were the most popular within the observed set of hackathons, need dedicated budgets, community-oriented events rely on local contributions, fostering community but facing scalability issues, while profit-oriented hackathons must balance financial stability with accessibility and participant needs. When it comes to sources, 90% of organizers use various sources simultaneously, but sponsorships and partnerships are the most popular method of choice thanks to their flexibility. Community-driven sources and self-funding prove vital for smaller hackathons but need extra support to grow. Grants and investments provide significant funding yet involve competitive and often challenging processes. Finally, registration fees support finances but can reduce inclusivity and create a significant barrier to joining the endeavor.

Addressing the limitations identified in this research-such as the sample size, diversity, and lack of longitudinal data-in future studies could explore the long-term impacts of different funding models, sector-specific adaptations, and the role of emerging technologies in hackathon financing. Moreover, understanding various perspectives on financing and exploring alternative funding models will provide valuable insights for designing more effective and equitable hackathons.

By optimizing financial strategies, organizers can enhance the development of hackathons, fostering innovation and collaboration across various domains. This research contributes to the academic understanding of hackathon financing and offers actionable knowledge for practitioners, ensuring that hackathons continue to serve as vibrant platforms for addressing complex challenges and driving social and technological advancements.

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