



Food and Agriculture
Organization of the
United Nations



The ultimate guide to agrifood

hackathons



The ultimate guide to agrifood hackathons

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Food and Agriculture Organization of the United Nations
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Contents

I.	Overview and purpose	1
II.	Hackathons: their history, trends and insights	6
III.	Hackathon case studies	11
IV.	Key features that set hackathons apart: delving into their uniqueness	26
V.	Types of hackathons	35
VI.	How to run a successful hackathon	39
	- Before the hackathon	41
	- During the hackathon	81
	- After the hackathon	86
VII.	Conclusions and future research on hackathons	88



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Our sincere appreciation goes to the participants and organizers of hackathons in the field of agriculture. Your passion for tackling real-world challenges, embracing innovation, and pushing the boundaries of what is possible has inspired the creation of this resource. It is a testament to the vibrant community that drives progress in agrifood systems.

Finally, our deepest appreciation goes to all individuals who, in various capacities, contributed to the realization of this handbook, in particular to Andrea Baker, for the editing work, and Diego Castagnacci, for the graphic design. Thank you for being part of this collaborative journey.

Foreword

This handbook will help you explore the intersection between hackathons and agricultural innovation. Utilizing hackathons fosters collaboration and innovation among diverse stakeholders and can catalyse advancements in agrifood systems for better food, nutrition, life and environment.

Agrifood systems are undergoing revolutionary changes in the wake of the challenges arising from the post-pandemic world, climate change and geopolitical shifts. The Food and Agriculture Organization of the United Nations (FAO) has actively embraced hackathons as one of several dynamic tools to identify ready-to-use and impactful solutions to contribute to the operationalization of national pathways for food system transformation. By bringing together diverse teams, including technologists, young entrepreneurs, end-users and experts, FAO's hackathons aim to create innovative solutions, leveraging innovative technology to address challenges such as sustainable agriculture and climate change impact on agrifood systems.

This handbook is an important resource designed specifically for hackathon organizers. By exploring practical strategies and real-world examples, it empowers participants with actionable knowledge and tools to effectively navigate the complexities of agrifood system hackathons.

Aligned with the United Nations Sustainable Development Goals (SDGs), this handbook emphasizes the potential of this approach to contribute to promoting sustainable land use, and creating more equitable and efficient agrifood systems. As you navigate through this resource, envision the role hackathons can play in sparking systemic transformations in agriculture.

We hope you will explore the practical aspects of designing, running, and evaluating impactful hackathons. Your engagement in hackathons, as outlined here, has the power to cultivate lasting solutions for a more resilient and sustainable future in agrifood systems.

Fostering change through innovative initiatives!

Vincent Martin

Director, Office of Innovation (OIN)
Food and Agriculture Organization of the United Nations



How to use this handbook:

Welcome to this comprehensive guide on hackathons! Whether you're a novice organizer, a seasoned participant, or just curious about hackathons, this handbook is designed to be your go-to resource. Here's how to make the most of it.

Abbreviations and terms: We use various abbreviations and specific terms throughout the handbook. You'll find a dedicated section explaining these to ensure clarity and understanding.

Blue boxes—special highlights: You will find key insights, important notes and expert tips highlighted in blue boxes. These snippets provide valuable information and are especially useful for quick reference.

Non-linear reading: This handbook is structured to cater to diverse needs. Feel free to jump directly to the sections that most interest you. It's not necessary to read from beginning to end – each section is designed to stand on its own while also contributing to the broader narrative of hackathons.

Interactive elements: You'll find interactive elements like checklists, templates, tips and links to external resources. These are included to enhance your learning and planning experience.

Practical examples and case studies: The handbook also includes practical examples and case studies to help you better understand the concepts. These real-world scenarios provide insight into the application of theories and strategies in actual hackathon settings.

Feedback and updates: The world of hackathons is in constant evolution. We welcome your feedback to keep this handbook relevant and updated. Share your experiences and suggestions with us!

Remember, this handbook is a living document designed to evolve with the dynamic world of hackathons. Use it as a guide, a source of inspiration, and a toolkit to navigate the exciting realm of hackathons more effectively.

Happy hacking!

Overview and purpose

CHAPTER 01



Overview and purpose

In an era where our world grapples with grand challenges like climate change, land degradation, and an escalating demand for food, feed and energy, it's imperative that we embrace innovative pathways. This handbook isn't just a collection of information; it's a call for a radical shift toward new paradigms.

It is a way to advocate for a systemic transition, powered by holistic, multidimensional, multilevel, multidisciplinary and multistakeholder approaches. To forge ahead, we must innovate relentlessly, revolutionize business models, and cultivate new organizational forms, skills and capabilities that transform creativity and science into impactful, practical and systemic transformations.

As guardians of our planet facing intricate issues and wicked problems, harnessing the power of innovation and collaboration is more crucial than ever. This guide is brimming with insights, strategies and resources designed to steer you through these critical challenges by using a particular vehicle: hackathons. Embark on a journey of discovery where competencies and mindsets become the tools to tackle urgent topics such as sustainable farming, food waste reduction, precision agriculture, climate-smart technologies, and regenerative agriculture.

What is a hackathon?

A hackathon is an event that brings together people with diverse backgrounds and expertise in a single location over a limited time to develop transformational ideas and artifacts.

The term “hackathon” is a linguistic fusion of the words “hack” and “marathon” that truly captures the spirit of these events and perfectly embodies what hackathons are all about. “Hack” in this context is about innovative problem-solving and tinkering with systems and processes to create something new. It's about deconstructing complex issues and piecing together creative solutions. The “marathon” element reflects the event's intense, sustained effort, as participants engage in a continuous burst of ideation, coding and problem-solving.

Hackathons are not just events; they're platforms and crossroads of transformation.

These intense, collaborative experiences assemble individuals from diverse backgrounds and expertise to forge transformational ideas and artifacts. As vital instruments of open or distributed innovation, hackathons break down knowledge barriers to address complex scientific, technological and societal challenges.



© Microsoft designer

The interconnection between food, agriculture and all 17 United Nations Sustainable Development Goals (SDGs) underscores the critical importance of innovation in this field. From eradicating hunger and poverty to ensuring clean water and sustainable land use, promoting decent work, and fostering life on land and below water, every SDG is intricately linked to how we produce, distribute and consume food. The health of our planet and its inhabitants hinges on transforming our food systems to be more sustainable, equitable and efficient. By focusing on these areas, hackathons become powerful catalysts, driving forwards the comprehensive agenda of the SDGs and paving the way for an inclusive, sustainable future where no one is left behind. The urgent need to find new ways in this field is not just about food security, but also about ensuring a healthy planet and a balanced, thriving global community.



Source: **United Nations**. 2023. Sustainable Development Goals. In: *United Nations*, New York [consulted on 19 March 2024] https://www.un.org/sustainabledevelopment/wp-content/uploads/2023/09/E_SDG_Guidelines_Sep20238.pdf

For these reasons, hackathons dedicated to food, agriculture and climate change can represent vibrant platforms and playgrounds for innovators at the nexus of these critical domains. With a collective aim to nurture sustainable and resilient food systems, teams explore solutions like precision agriculture, sustainable farming practices, efficient food distribution systems, climate-smart technologies, and data-driven strategies. By promoting interdisciplinary collaboration and rapid prototyping, these hackathons empower participants to forge groundbreaking ideas and create pragmatic solutions that aim to counteract climate change, enhance agricultural practices and farmers' livelihoods, and bolster global food security.

Yet, despite their growing prominence, the true essence and potential of hackathons, particularly in the agrifood context, have been largely underexplored, leading to an increase in events with questionable impacts.

To fill this gap, the present research commenced with an exhaustive analysis of materials from institutes like EduHack and Zhejiang University, and was further enriched by literature reviews, bibliometric analyses, examinations of online reports, in-depth interviews with experts, case studies of successful formats, and the firsthand observation of the author who participated in over 70 hackathons across six continents between 2014 and 2024.

This handbook outlines the entire process of designing, running and evaluating an impactful and successful hackathon throughout all its stages (before, during and after). It's crafted to bolster your understanding, efficiency and effectiveness in orchestrating hackathons as potent tools for innovation, especially in catalysing agrifood system transformations. Engage with this manual as your guide to steering the future of sustainable innovation and making a tangible impact in the agrifood sector.

Ready, set, hack!



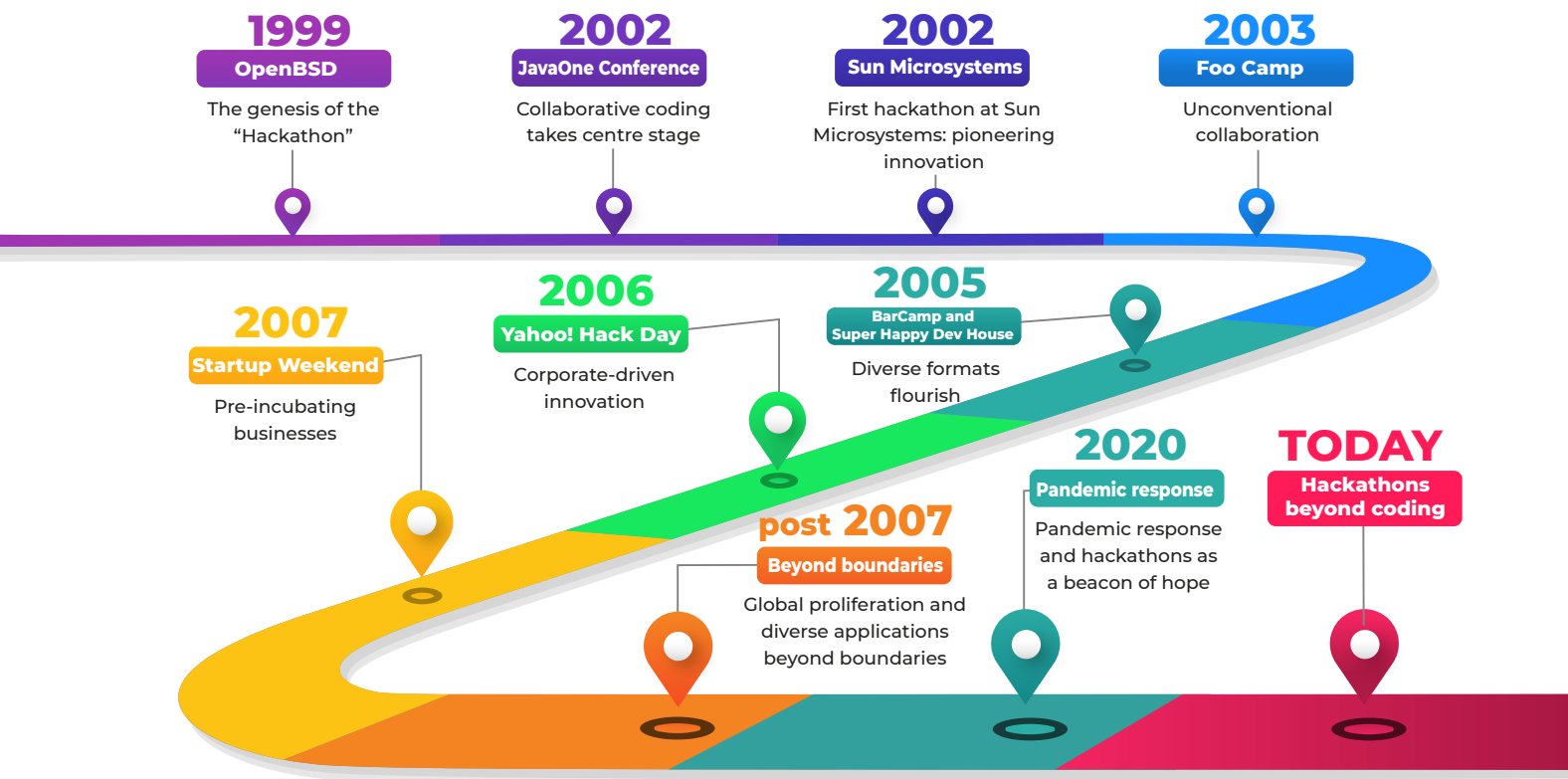
Hackathons: their history, trends and insights

CHAPTER 02



CHAPTER 2

Hackathons: their history, trends and insights



Source: Author's own elaboration © Freepik

From their humble tech-related beginnings to their current stature as platforms of creativity, hackathons have shaped the trajectory of technology innovation and beyond. This section explores the milestones and metamorphoses of these dynamic events, offering practitioners a rich tapestry of history, trends and insights.

1999 – OpenBSD: the genesis of the “Hackathon”

On 4 June 1999, in Calgary, Canada, Niels Provos coined the term “hackathon” during an OpenBSD event, where a group of ten developers congregated in a house for two days. Their mission? To identify and rectify vulnerabilities in the standard framework securing internet protocol (IP) communications on the internet by developing cryptographic software. This pivotal moment not only marked the birth of the term but also set the stage for future collaborative coding marathons.

1999 – JavaOne Conference: collaborative coding takes centre stage

Merely days after the OpenBSD initiative, participants joined forces with Sun Microsystems' marketing team to launch the "John Gage Challenge" at the JavaOne Conference (15–19 June 1999). Their quest? To craft code in Java for personal digital assistants (PDAs). This event, along with OpenBSD's, heralded the dawn of the hackathon era.

2002 – First hackathon at Sun Microsystems: pioneering innovation

In 2002, Sun Microsystems hosted what's often recognized as the first official hackathon, uniting employees and external developers. Within a whirlwind 24-hour period, innovative software projects sprang to life. This event was a trailblazer, showcasing the potential of hackathons as hotbeds for fostering innovation and collaboration.

2003 – Foo Camp: unconventional collaboration

Foo Camp, initiated in 2003 by O'Reilly Media, broke the mold with its invitation-only, agenda-free format. Here, tech luminaries crafted the schedule upon arrival, leading to spontaneous lectures, demonstrations and discussions. This event was a crucible for solving pressing issues like spam reduction, and symbolized the burgeoning era of competitive community hackathons.

2005 – BarCamp and Super Happy Dev House: diverse formats flourish

BarCamp and Super Happy Dev House emerged in 2005 as antitheses to structured, opaque events. BarCamp's rules, open to alteration on a wiki, and Super Happy Dev House's 12-hour project marathons without financial incentives illustrated the evolving landscape of hackathons. These gatherings aimed to foster a profound sense of community and innovation.

2006 – Yahoo! Hack Day: corporate-driven innovation

Yahoo!'s internal Hack Day in 2006 marked the advent of "Brand/Corporate Hackathons". Here, 500 engineers and developers convened to create applications around Yahoo's assets, signifying the shift of hackathons into corporate culture.

2007 – Startup Weekend: pre-incubating businesses

The era of start-ups found its match in Startup Weekends, beginning in July 2007. These events began as pre-incubators for creating start-ups over a weekend, focusing on practical concepts beyond technical prowess. They epitomized the “Startup Hackathons” trend, illustrating the expanding influence of hackathons, and creating a lasting brand in this space.

Post–2007: Global proliferation and diverse applications beyond boundaries

After 2013, hackathons witnessed an explosion in popularity. Companies and venture capitalists increasingly viewed them as rapid-fire workshops for software development, innovation spotting and funding. Success stories like GroupMe and PhoneGap emerged from these events, highlighting their potential as launchpads for significant ventures. NASA’s International Space Apps Challenge, launched in 2012, set a new benchmark for global hackathons, inspiring participants to employ technology for space exploration and Earth science. Universities like MIT and Stanford have also been at the forefront, organizing landmark hackathons that merge academic rigor with real-world problem-solving. MIT’s renowned HackMIT, initiated in 2013, and Stanford’s TreeHacks, which began in 2015, have become annual fixtures drawing bright minds worldwide. Additionally, corporate giants like Facebook and Google have pioneered their own hackathons, such as Facebook’s Hackathon (first held in 2007) and Google’s Hash Code (debuted in 2014), pushing the boundaries of innovation and technology. These organizations have expanded the reach of hackathons, and also diversified their potential, proving them a powerful tool for generating groundbreaking ideas and solutions across various domains. The founding of Major League Hacking (MLH) in 2013 further catalysed this growth, providing essential support and standardization.

2020: Pandemic response and hackathons as a beacon of hope

The health sector, especially during the COVID-19 pandemic, saw a surge in hackathon-style events aimed at addressing pandemic-related challenges, illustrating the adaptability and societal impact of hackathons. Events like the MIT COVID-19 Datathon and EUvsVirus brought together global communities to find solutions, showcasing the power of collective intelligence in crisis.

Hackathons today: beyond coding

Today, hackathons have evolved from casual coding gatherings to structured, diverse co-creation marathons. They’re now synonymous with fast-paced, challenge-based innovation and education across fields, from service design to business model creation. Yet, they face scrutiny over their ability to deliver long-lasting, impactful

solutions, prompting a call for deeper, more sustainable approaches, especially in critical areas like food and agriculture. The agrifood sector, pivotal for goals like zero hunger, clean water, and climate action, stands to benefit immensely from the innovative solutions and collaboration that hackathons foster. Despite the exponential growth of hackathons and questions about their success and impact, when meticulously planned and organized, these events can be groundbreaking for their organizers, participants with diverse roles, and society at large. This is the driving force and the Why behind the creation of this handbook.

In navigating the rich history and evolving landscape of hackathons, the hope is to equip practitioners in the agrifood sector with insights and inspiration to drive meaningful change.

As you turn the pages of this handbook, envision the transformative potential of hackathons in shaping a sustainable, innovative future in agriculture and beyond.

Let's continue hacking our way to a more nourished world!

Hackathon case studies

CHAPTER 03



Hackathon case studies

CHAPTER 3

Startup Weekend

Startup Weekend

© FAO / Diego Castagnacci

Startup Weekend has etched its name as a synonym for innovation and collaboration. Founded in July 2007 in Boulder, Colorado by Andrew Hyde, this event rapidly became a global phenomenon. Held over a 54-hour weekend, aspiring entrepreneurs dive deep into the start-up life, connecting with potential co-founders, mentors and sponsors. The event typically starts with Friday night pitches and continues with brainstorming, business plan development, and basic prototype creation, culminating in Sunday night demos and presentations.

Participants come from various backgrounds, including software development, graphic design, marketing, and business management, all aiming to pitch ideas and team up to create a viable product or service. The

model quickly expanded to cities all over the world, reflecting its adaptability and universal appeal. Upon its 2015 acquisition, Startup Weekend became part of Techstars' start-up programmes, marking a significant milestone in its journey.

Key features:

- networking with creative minds from diverse fields;
- embarking on new ventures in an immersive environment;
- gaining insights from industry experts and mentors; and
- enhancing entrepreneurial skills and knowledge.

Learn more at: <https://www.techstars.com/communities/startup-weekend>

Lean Startup Machine

Lean Startup Machine

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Launched in 2010 by Trevor Owens, Lean Startup Machine (LSM) is a comprehensive three-day workshop that takes participants on an intensive entrepreneurial journey. It's designed for both seasoned and budding entrepreneurs aiming to validate their business ideas through rigorous testing and customer feedback. During the event, participants learn to identify key customers, develop prototypes, and pivot or persevere based on real-time feedback.

Unlike traditional hackathons, LSM focuses less on the final product and more on the learning process, encouraging participants to think critically and iterate quickly. The winning team is determined not by who has the best idea, but who employs the

most effective lean methods. This unique approach has made LSM a must-attend event for entrepreneurs looking to build scalable and sustainable businesses.

Key elements:

- emphasis on validating business ideas through customer feedback;
- intensive, hands-on experience with lean start-up methodologies;
- focus on the learning and iterative process over the final product; and
- recognition for teams that best employ lean techniques.

Learn more at: <https://startupstash.com/tools/lean-startup-machine/>

Global Jam

Global Jam

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The Global Jam, initiated in 2011, is a vibrant 48-hour event that brings together designers, developers and innovators from around the world to address social challenges. Participants collaborate in local groups but are connected in a global network, working simultaneously to create short-term interventions with long-term impacts. The event emphasizes a grassroots approach, with local knowledge playing a critical role in addressing global themes.

Recently rebranded as Global Goals Jam, it aligns closely with the United Nations Sustainable Development Goals, reflecting its commitment to address the world's most pressing issues. Local organizers, ranging from universities and design labs to non-governmental organizations (NGOs) or consultancies,

apply to host a jam in their city. The central team supports them with a jam toolkit and online training, guiding the design process from conception to execution.

Key elements:

- collaborative problem-solving on a local and global scale;
- multidisciplinary teams bringing diverse perspectives and expertise;
- open-source sharing of processes and outcomes for community benefit; and
- direct alignment with the United Nations Sustainable Development Goals.

Learn more at: <https://globalgoalsjam.org/>

DigiEduHack

DigiEduHack

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The Digital Education Hackathon (DigiEduHack), an initiative of the European Institute of Innovation and Technology (EIT), represents a bold step into the future of digital education. Launched between 2019 and 2021 under the leadership of EIT's Climate-KIC and coordinated by Aalto University, it's a two-day event that takes place in over 60 cities worldwide. Participants are given the task of designing innovative solutions to improve the lives of learners and educators in Europe and beyond.

DigiEduHack offers a unique opportunity for individuals to make a tangible impact on digital education. It encourages teams to think creatively, design effectively, and develop solutions that have the potential to reshape the educational landscape. In addition to a monetary reward, the global winning teams also receive exposure

and the prestigious title of DigiEduHack Global Ambassador. Each participant is awarded a blockchain-based certificate, adding value to their professional journey.

Key elements:

- focus on pioneering solutions in digital education;
- global community network with simultaneous events in multiple cities worldwide;
- recognition and rewards for outstanding innovation and impact; and
- emphasis on shaping the future of education in a digital era.

Learn more at: <https://digieduhack.com/>

EUvsVirus

EUvsVirus

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The EUvsVirus Program, a visionary initiative organized by the European Commission in 2020, was a comprehensive response to the COVID-19 pandemic. As a combination of a Pan-European Hackathon and Matchathon, it aimed to foster innovative solutions for coronavirus-related challenges. With the patronage of Commissioner Mariya Gabriel and led by the European Innovation Council, EUvsVirus represented a united effort to spark development and facilitate partnerships across Europe.

The programme involved 2 164 multidisciplinary, multinational teams, and facilitated the creation of 2 235 new cross-European partnerships. It matched the best 120 teams with over 500 supportive partners from the public and private sectors, catalysing a

wave of innovation and collaboration. The timeline of the initiative serves as a testament to its impact and reach, showcasing how collective action can address global crises.

Key elements:

- multinational, multidisciplinary collaboration for crisis response;
- focus on creating innovative solutions to pandemic-related challenges;
- extensive partnership network across European public and private sectors; and
- a testament to the power of collective intelligence and innovation.

Learn more at: <https://www.euvsvirus.org/>

Climathon

Climathon

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Climathon, orchestrated by EIT Climate-KIC and run independently by organizations that are knowledgeable about local ecosystems, is an annual event that mobilizes cities, towns, and regions globally for a two-day climate action marathon. It brings together thousands of participants each year, united by a mission to catalyse systemic change and create climate-resilient communities.

The event's theory of change is centred around empowering people to transform their cities, towns and regions through exploration, experimentation and demonstration. It aims to enable viable alternatives at scale, raising climate

awareness and strengthening local ecosystems. Participants are inspired to develop projects and take actions that have a lasting impact on their communities and beyond.

Key messages:

- promoting a deep understanding of climate issues;
- empowering local ecosystems to drive change; and
- fostering inspiration for sustainable projects and climate actions.

Learn more at: <https://climathon.climate-kic.org/>

CitizensHack

CitizensHack

© FAO / Diego Castagnacci

Supported by the European Union Commission, CitizensHack2022 was a revolutionary initiative designed to engage citizens in translating research and innovation results into societal value. It catered to a wide audience, from students and entrepreneurs to developers, all motivated to make a positive impact on their community and society through the co-creation of novel solutions. This hackathon served as a platform for participants to apply new business models, social innovations, prototypes and more, all while gaining visibility and support at a European Union level.

The initiative's partners, including OI-Net, Eurocities, Aalto Startup Center (ASUC) and UltraHack, brought a wealth of resources and expertise to the table. Participants benefited from the

collaborative atmosphere, gaining access to a network of European cities and the opportunity to work alongside researchers and a diverse team.

Key elements:

- co-creation of solutions for real-life societal issues;
- European Union-level visibility and support for participants;
- a collaborative environment with access to a vast network; and
- integration of research and innovation for tangible societal impact.

Learn more at: <https://ultrahack.org/citizenshack-2022>

NASA SpaceApps

NASA SpaceApps

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The NASA International Space Apps Challenge is an annual global hackathon that serves as an incubator for innovation and civic engagement. Since its inception in 2012, it has grown into a movement that embodies the principles of transparency, participation and collaboration. Enthusiasts from around the world, regardless of their background, come together to develop creative solutions using data supplied through NASA missions and technology.

The first Space Apps event was attended by 2 000 people across 17 countries. Since then, the programme has expanded dramatically, both in participation and scope. In the early years, the focus was primarily on space science and technology. However, it has since broadened to include Earth science, technology, arts, and humanities

challenges. The 2020 Space Apps COVID-19 Challenge marked a milestone, involving over 40 000 participants in 87 countries, demonstrating the event's global reach and impact.

Key features:

- leveraging open data and technology for innovation;
- encouraging global participation and collaboration;
- focusing on a broad range of challenges, from space to Earth; and
- fostering a community of passionate and skilled volunteers.

Learn more at: <https://www.spaceappschallenge.org/>

HackZurich



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Founded in 2014, HackZurich has distinguished itself as Europe's largest and most prestigious hackathon. Each year, it invites 600 international participants, who are joined by an equal number participating remotely in a hybrid setup. Selected from over 6 000 applications, these tech talents represent elite universities from more than 85 countries.

Over the course of 40 hours, the participants work in teams of two to five people to develop highly innovative web, mobile and hardware applications. International companies and organizations from various industries provide cutting-edge hardware, technologies, tools, datasets and

application programming interfaces (APIs) to inspire the creation of new prototypes. The event's atmosphere is electric, fostering fun, knowledge exchange, and a unique opportunity for mutual learning and inspiration.

Key features:

- a vibrant, knowledge-sharing environment;
- a blend of creativity and cutting-edge technology; and
- opportunities for mutual learning and inspiration among global tech talents.

Learn more at: <https://hackzurich.com/>

AngelHack Hackcelerator

AngelHack Hackcelerator

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AngelHack, founded on the idea of bringing creators together, has introduced many initiatives in over 100 cities worldwide. Among these, HACKcelerator stands out as a 12-week pre-accelerator programme that combines mentorship, speakers, workshops and connections with industry leaders. It aims to help ambitious hackers become versatile, refine their ideas, and turn their hackathon-winning prototypes into fully fledged start-ups.

With a start-up portfolio valuation of USD 70M and acquisitions by tech giants like Google and BOX, AngelHack is one of the highest valued pre-accelerators in the industry. The programme encourages a diverse community of start-ups,

developers and entrepreneurs to become holistic and well-rounded hackers, realizing their potential for innovation.

Key elements:

- intensive mentorship and learning over 12 weeks;
- focus on transforming prototypes into viable start-ups;
- a thriving community of start-ups, developers and entrepreneurs; and
- a track record of success and industry recognition.

Learn more at: <https://angelhack.com/>

MIT COVID-19 Hackathon/Datathon

MIT COVID-19 Hackathon/Datathon

© FAO / Diego Castagnacci

The MIT COVID-19 Datathon, held in 2020, was a groundbreaking week-long virtual event. It brought together data scientists, clinicians, public health professionals and other experts to develop insights leveraging existing datasets. The aim was to influence policy and decision-making in both the public and private sectors, providing a collaborative approach to tackle the COVID-19 challenge.

Throughout the event, teams were connected to technical resources, datasets, developer platforms and experienced mentors. This support helped them create, iterate, build and develop solutions rapidly. The winning teams were awarded computing resources, organizational support, and direct access to key partners to further develop, validate and implement their

solutions, making a tangible impact in the fight against the pandemic.

Key features:

- interdisciplinary collaboration for a common cause;
- leveraging data for meaningful insights and solutions;
- comprehensive support and resources for rapid development; and
- opportunities for implementation and real-world impact.

Learn more at www.covid19challenge.mit.edu

World Food Programme Innovation Challenge

World Food Programme Innovation Challenge

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The World Food Programme (WFP) Innovation Challenge seeks to discover and support game-changing innovations to address the global food crisis. It focuses on innovative solutions that can mitigate the rising cost of inputs and food, strengthen productivity along food value chains, and build resilient communities through livelihood creation and youth engagement.

The World Food Programme provides up to USD 100 000 in equity-free funding, access to WFP units for further development and refinement, hands-on support from technical and industry mentors, and a six-month acceleration programme. Participants also benefit from networking with a robust network of public, private and government partners,

amplifying the impact and reach of their solutions.

Key elements:

- focus on innovative solutions to global food crises;
- significant funding and resources for development and scaling;
- comprehensive support and mentorship from experts; and
- networking opportunities with a strong partner network.

Learn more at: <https://innovation.wfp.org/wfp-innovation-challenge>

AgriTechHack

AgriTechHack

© FAO / Diego Castagnacci

In 2019, Nik Academy orchestrated the AgriTechHack, held on 13-14 September in Bulgaria, supported by the Dutch Embassy, FarmHack.NL and the local Digital Innovation Hub AgroHub.BG. This hackathon has gained regional significance as a showcase event for the European project Smart Agri Hubs (SAH), which contributed a substantial prize pool of EUR 10 000 to foster innovation and expand its network with the ideas and talent sourced from the hackathon.

The AgriTechHack was a 28-hour marathon and featured four main challenges: beekeeping technologies, IoT automation, machine data, AI and robotics. Each challenge was supported by recognized mentors and leading domain experts, guiding the teams to focus on specific points and leverage compelling datasets within the topic. Key features:

- targeted integration of cutting-edge technologies, such as robotics, IoT, big data, and artificial intelligence to revolutionize agricultural practices;
- substantial financial incentives and resources for development and scaling;
- dedicated expertise and mentorship from esteemed mentors and leading industry experts;
- and enhanced connectivity within a robust and supportive partner network.

Learn more at: <https://www.farmhack.nl/agri-tech-hack-in-bulgaria/>

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AgHack

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AgHack, an initiative orchestrated by the Ministry of Data (MoD) in collaboration with SGInnovate, presented a groundbreaking opportunity for Singapore start-ups to venture into the Australian market. This event, held over a stimulating weekend from 27 to 29 July 2018, was not just a hackathon, but also a gateway for start-ups to demonstrate their prowess in creating innovative, globally relevant products at a regional level. It served as a bridge between Singapore's burgeoning start-up community and the vast agricultural industry of Australia, offering a unique platform for cross-border collaboration and innovation.

By partnering with the Government of Western Australia – Department of Primary Industries and Regional Development (DPIRD), AgHack focused on real-world agricultural challenges, providing start-ups with pre-validated problems that were not just local to Western Australia, but also resonated

globally. This strategic alignment ensured that the solutions developed had the potential for broader applicability and impact, addressing pressing issues faced by governments and enterprises worldwide.

Key elements:

- international market access and showcase;
- direct engagement with industry experts before, during and after the hackathon;
- focus on pre-validated agricultural challenges faced globally by governments and enterprises; and
- commitment to post-hackathon commercialization.

Learn more at: <https://opengovasia.com/western-australia-holds-hackathon-to-seek-new-digital-solutions-for-agricultural-sector/>

Key
features that
set hackathons
apart:
delving into
their uniqueness

CHAPTER
04



CHAPTER 4

Key features that set hackathons apart: delving into their uniqueness

As we've journeyed through the history of hackathons and explored various case studies, it's evident that while hackathons can differ in many ways, certain core elements are vital to their identity. This section uncovers the indispensable characteristics that all hackathons and hackathon-like initiatives should embody, providing a foundation for success and impact.



Source: Author's own elaboration

The theme and challenge

At the heart of every hackathon lies a theme and a challenge – a beacon guiding the creativity and efforts of all participants. The theme serves as the event's soul, sparking interest and engagement. It's the magnetic force that pulls together individuals and teams, uniting them under a shared goal. Carefully chosen, a theme can transform a

mere gathering into a crucible of innovation.

When choosing a theme, organizers need to consider the reasons and purpose behind the hackathon being held. **A great and relevant theme is key to a hackathon's success!** Organizers also need to keep in mind that they are asking a group of people with distinct roles (participants, mentors, jury members...) to dedicate their personal and professional time to the initiative. **Why** would they want to do it? Essentially, the hackathon should have a vision that will get people excited about getting involved, and that will make the event stand out from other initiatives.

A well-crafted theme is:

- **simple and understandable**

The theme should be immediately clear and concise, allowing every participant, regardless of their background, to swiftly grasp the concept and its importance. A straightforward theme ensures that all participants start on the same page and can contribute effectively from the get-go.

- **relevant**

The theme should resonate with current trends, needs, or problems, making the hackathon timely and significant. It should connect with real-world issues that participants feel passionate about, ensuring that their creative and intellectual efforts contribute towards meaningful, impactful solutions. Relevance also helps in attracting sponsors, mentors and participants who are aligned with the cause or industry.

- **broad yet attainable**

The theme should be broad enough to accommodate a wide range of innovative ideas and approaches, allowing participants to explore various aspects of the problem and encourage out-of-the-box thinking. However, it should also be narrow enough to provide a clear focus and ensure that the challenges are achievable within the given time frame. This balance is crucial to keep participants motivated and directed towards creating viable solutions.

- **aligned**

The theme should reflect and resonate with the values and goals of the stakeholders involved, whether they are companies, non-profit organizations, or educational institutions. It should tie in with the event's intended outcomes, the nature of the prizes, and the overall spirit and atmosphere of the hackathon. This alignment ensures that the event feels cohesive and purposeful, with every element reinforcing the central theme.

Selecting the right theme and challenge is a pivotal step in hackathon planning. It sets the tone for the event and influences the type of participants it attracts, the solutions developed, and the overall impact of the hackathon.

The teams

The lifeblood of successful hackathons is the presence of motivated teams, with each member bringing a unique set of ideas and perspectives to the table. Typically comprising three to six members, these teams are a melting pot of:

- **diverse skills**

combining graphic design, storytelling, UX/UI, business acumen, legal knowledge, policy understanding, data analysis, technical expertise and software development. The richer the diversity of skills, the broader the spectrum of ideas and solutions. Encouraging participants from various industries and sectors can lead to a fusion of thought that propels innovation beyond conventional boundaries.

- **cultural diversity**

Introducing a mix of cultures into teams is a catalyst for creativity. When individuals from different cultural backgrounds collaborate, they bring unique viewpoints and problem-solving approaches. This diversity enriches the teams' perspectives, encouraging them to think outside the box and explore uncharted territories in their solutions. A cross-cultural team is more likely to challenge assumptions and push the boundaries of innovation.

- **gender and age diversity**

Including a balance of genders and a range of ages can significantly enhance the team's dynamic and output. Different genders and generations offer varied experiences, insights and problem-solving strategies. This diversity fosters a more inclusive environment, where every voice is heard and valued. It encourages teams to consider a wider range of user needs and perspectives, leading to more comprehensive and universally applicable solutions.

- **collaboration and competition**

Aim to balance teamwork with a healthy competitive spirit. While teams work together towards a common goal, the spirit of competition adds an edge to the hackathon, pushing teams to not only collaborate effectively, but also to outdo each other in innovation and execution. This balance ensures that teams are motivated to perform their best while fostering a sense of community and shared purpose.

The novel solution

The heart of the hackathon is the development of a novel solution to the identified challenge. Indeed, hackathons are regarded as settings of innovation that encourage experimentation and creativity.

The level of readiness and completeness of the solutions developed by the teams is decided by the hackathon organizing team, based on the purpose of the initiative and often on the expectations of the stakeholders involved. The types of solutions that emerge vary widely, reflecting the diversity of challenges and the creativity of the participants.

Common solutions developed during hackathons include:

- **minimum viable products (MVPs)**

These are the bare-bones version of products designed to solve the identified problem with the least effort and complexity. The MVPs are crucial, as they provide immediate feedback from the target audience and pave the way for further development.

- **proofs of concept (PoCs)**

These are demonstrations to verify that certain concepts or theories have the potential for real-world application. A PoC is often a prototype that is not fully functional but enough to prove the idea's feasibility.

- **sketched prototypes**

These are the initial visualizations of a product's design. Sketched prototypes help in understanding the look and feel of a product and are a quick way to iterate over the design before moving on to more detailed stages.

- **mock-ups of digital applications**

These are detailed designs of a product that give an idea of what the final product will look like, but they do not include the functionality. They are useful for getting stakeholder approval and for user testing.

- **detailed plans for initiatives**

These are comprehensive strategies outlining how a particular solution can be implemented. They include timelines, resource allocation, and step-by-step plans for turning ideas into reality.

- **codes (when holding coding competitions)**

Often the focus of hackathons with a heavy emphasis on software development, the code is a tangible output representing the technical backbone of a solution. A good code should be well documented, maintainable and scalable, serving as a solid foundation for further development.

- **demos**

A demo is a live presentation where the team showcases the functionality of their solution. A compelling demo not only illustrates the team's technical accomplishments but also highlights the potential impact and usability of the solution.

- **new features for an existing digital platform**

Sometimes, innovation lies not in creating something entirely new but in enhancing what already exists. Developing a new feature for an existing platform can significantly improve its functionality, user experience, or performance.

- **functional prototypes of new products or services**

These are tangible, working models of the proposed product or service. Unlike MVPs or PoCs, functional prototypes are more refined and closer to what the final product might look like and how it would function. They allow users to interact with the product or service, providing valuable feedback on its functionality, design and user experience.

The journey from a nascent idea to a tangible solution is a thrilling one. Each solution, be it an MVP, a detailed plan, or a functional prototype, represents a leap forward in addressing the challenge at hand. These solutions embody the essence of the hackathon: a concentrated effort of minds and talents coming together to create something novel which is tangible and useful. They reflect not just the technical and creative skills of the participants but also their dedication to solving real-world problems.

Participants are encouraged to push the boundaries of their creativity, think laterally, and work collaboratively. The result is a testament to what can be achieved when diverse minds come together in a supportive, time-pressured environment to focus on a common goal.

Time constraints

One of the defining elements that truly distinguishes hackathons from other innovation platforms is their time constraints. This characteristic consistently emerges as a primary descriptor in definitions of hackathons. Typically spanning between 24 and 72 hours, hackathons transform the ticking clock into a dynamic force that fuels a high-energy, fast-paced environment. Originally, hackathons, especially those centred around coding, were marathon sessions characterized by sleepless nights and a surplus of caffeinated beverages to keep teams alert and continuously productive.

However, a successful hackathon is more than just a relentless race against time. It's about creating a compelling, exciting and well-balanced experience. The best hackathons artfully weave together:

- **moments of inspiration**

times when participants are energized by guest speakers, engaging workshops, or simply by the collective buzz of creative energy that fills the room. These moments spark new ideas and approaches, reinvigorating teams when energy starts to wane.

- **focus and teamwork**

dedicated periods where teams dive deep into problem-solving and innovation. This is when the diverse skills and perspectives of team members truly come into play, as everyone works collaboratively to develop their novel solution.

- **fun and relaxation**

Intervals of light-hearted activities or breaks are crucial. They provide the participants with much-needed downtime to relax, mingle and rejuvenate. This not only prevents burnout but also fosters a more enjoyable and sustainable working environment.

- **stress relief and support**

Acknowledging the pressure that comes with tight deadlines, successful hackathons provide mechanisms for stress relief, be it through mentor support, mindfulness sessions, or simply ensuring there's a quiet corner for rest.

Striking the right balance is key. An effective hackathon is long enough to allow for the development of substantial solutions, yet short enough to maintain a sense of urgency and excitement. Often scheduled over weekends, hackathons consider the participants' availability, minimizing the need for them to miss work or school.

This time-bound intensity is what sets hackathons apart. It transforms time from a mere measure into a vital ingredient of innovation, making every minute count. The pressure to deliver within the deadline propels teams forward, encouraging quick thinking, creativity and decisive action. Yet, within this whirlwind of activity, moments of inspiration, focus and fun are critical to keep spirits high and minds sharp. Together, these elements create a unique atmosphere where innovation is not just possible, but inevitable.

Mentoring

The presence of expert mentors is another hallmark that sets hackathons apart from other creative and innovation initiatives. These individuals are the guiding stars, illuminating the path for participants as they navigate the intricate journey of turning an idea into a tangible solution. Their wisdom, expertise and guidance are invaluable resources, offering teams a compass to steer by in the often turbulent waters of rapid innovation.

Good mentors are foremost great listeners. They foster an environment of engagement and inclusion, ensuring that every team member's voice is heard and valued. By encouraging an iterative learning-by-doing process, they help teams to experiment, learn from their missteps, and evolve their ideas. They strike a delicate balance between guiding the teams and allowing them the freedom to explore and make their own discoveries.

The typologies of mentors in hackathons generally fall into two main categories:

- **subject expert mentors**

These mentors bring deep knowledge in specific areas related to the hackathon's theme or particular aspects of the solutions being developed. They could be specialists in business models, user experience, technology, or any other field relevant to the hackathon's focus. Their role is to provide targeted advice and insights, helping teams to refine their ideas and overcome technical or conceptual challenges.

- **process expert mentors or generalist mentors**

These mentors have a broad understanding of the hackathon process from start to finish. They offer guidance on the overall journey, from initial ideation through to the final pitch. Their expertise isn't limited to a specific subject area, but rather encompasses the holistic process of innovation and teamwork. They are adept at helping teams manage their time effectively, navigate hurdles, and stay aligned with the hackathon's objectives.

In both cases, mentors act as catalysts, accelerating the team's journey from concept to creation. They provide a sounding board for ideas, offer constructive criticism, and can open doors to networks and resources that the teams might not otherwise have access to.

In cultivating this mentoring landscape, not only do hackathons enhance the participants' experience and potential for success, they also contribute to a culture of continuous learning and mutual support. The mentorship aspect of hackathons is not just beneficial for the mentees; it's also a rewarding experience for the mentors themselves, who have the opportunity to share their knowledge, inspire the next generation of innovators, and stay connected with the latest trends and fresh perspectives.

The jury evaluation

At the culmination of the hackathon, the focus shifts to the expert jury, a panel entrusted with the pivotal task of evaluating the solutions developed by the teams. This group, often composed of industry specialists, seasoned entrepreneurs and

subject matter experts, plays a critical role in determining the success of the participants' efforts.

The jury assesses the appropriateness and potential of the ideas against a set of specific evaluation criteria, typically encompassing:

- **innovation**

The jury examines the uniqueness and originality of the solution. They look for ideas that break new ground or offer a novel approach to addressing the challenge, reflecting a departure from conventional methods.

- **feasibility**

This criterion evaluates whether the solution can be realistically implemented. It considers the practicality of the idea, including the availability of resources, technology and time required to turn the concept into a viable product or service.

- **impact**

The jury measures the potential effect of the solution on the identified challenge. They consider the scale and significance of the solution's contribution to resolving the issue or advancing the field.

- **pitch quality**

Often, the success of a solution hinges not just on its technical merits but also on how well it is communicated. The jury assesses the clarity, persuasiveness and overall presentation of the pitch, evaluating how effectively the team conveys the value and potential of their solution.

To uphold transparency and fairness, it's imperative that these evaluation criteria are clearly communicated to the participating teams at the outset of the hackathon. This information is often included in the promotional or communication materials of the initiative, ensuring that all participants understand what is expected and how their work will be judged. Furthermore, jury members themselves should be briefed in advance, and provided with a detailed outline of the judging criteria, their meaning and weight. This preparation helps ensure a consistent and fair evaluation process.

The jury's assessment is not only about determining winners; it's also an opportunity to provide constructive feedback, helping teams understand the strengths and weaknesses of their solutions. This feedback can be invaluable for participants, offering insights and guidance that can help them further refine their ideas, whether within the context of the hackathon or in their future endeavours.

The jury's role is thus multifaceted, involving assessment, feedback, and often mentorship. Their contribution is crucial to the learning experience of the hackathon, helping to foster an environment where innovation is not only encouraged but also recognized and rewarded.

Types of hackathons

CHAPTER 05



Types of hackathons

As we have seen so far, the diverse world of hackathons is as varied as the problems they aim to solve and the participants they attract. Each type offers a unique approach to fostering innovation, community building and problem-solving.

In academic and practitioner literature, a rich tapestry of classifications for hackathons is evolving, reflecting the dynamic nature of these events. As of now, there is no single, universally accepted categorization. This handbook aims to demystify and illustrate the most prominent classifications and their related types of hackathons, providing valuable insights for a diverse audience. Whether you're an organizer, participant, or sponsor, understanding these classifications can significantly enhance your approach and experience.

For organizers, these classifications are more than just academic distinctions; they are practical tools. In the intricate design stage of planning a hackathon, knowing the different types and their unique characteristics can guide you in choosing the most suitable format. This informed decision-making is crucial to aligning the event with your intended objectives and desired impact. Whether your goal is to foster community development, drive technological innovation, or solve critical industry challenges, understanding the various hackathon formats will empower you to design an event that not only meets, but even exceeds expectations.

By presenting these classifications, this handbook serves as a navigational aid, helping you chart a course through the diverse landscape of hackathons and select the path that best suits your goals and the needs of your participants. As hackathons continue to grow and diversify, staying informed about these classifications will enable you to harness their full potential for creativity, collaboration and innovation.

**Nolte and colleagues (2020)
classification:
entrepreneurial vs community
hackathons**

Nolte and colleagues delineate a clear distinction between entrepreneurial and community hackathons:

entrepreneurial hackathons

These events are dynamic engines of business innovation. They serve as launchpads for budding entrepreneurs, offering a platform where ideas can transform into viable start-ups. Participants typically dive into intense networking sessions, team formations and product development, often with a keen eye on attracting investors and mentors. The motivation here is not just to win, but to potentially launch the next big thing in the tech world. Entrepreneurial hackathons often have a competitive edge, with significant prizes and funding opportunities for the most promising projects.

community hackathons

In contrast, community hackathons are more collaborative and often altruistic. They bring together like-minded individuals – researchers, students, practitioners – to address communal, civic, or ecological issues. The focus here is on building and expanding communities, sharing knowledge, and collaboratively tackling challenges that matter to society. These hackathons often result in open-source projects, civic apps, or initiatives that aim to make a positive impact on the community or environment.

**Briscoe and Mulligan (2014)
classification: tech-centric vs
focus-centric hackathons**

Briscoe and Mulligan offer a categorization based on the primary focus of the hackathon:

tech-centric hackathons

These events are a playground for developers and tech enthusiasts. The primary focus is on creating or improving technology – whether it's developing a new app, exploring a specific platform (like mobile or web development), or innovating within a particular genre (such as video games or music software). Tech-centric hackathons often revolve around a specific language, framework, or API, pushing participants to showcase their technical prowess.

focus-centric hackathons

These hackathons are mission-driven, aiming to address specific social issues, business objectives, or demographic needs. They might focus on improving education, enhancing city transit systems, or fostering government transparency. Some are demographic-specific, targeting particular groups like women, students, or teenagers to ensure inclusivity and diversity in technology. Company-internal hackathons also fall under this category, where employees innovate on new products or features – Facebook's Like button is a product of such an internal event.

**HackerEarth classification: a
multidimensional approach**

HackerEarth presents a multifaceted view of hackathons, categorizing them based on various features:

**internal vs external
hackathons**

Internal hackathons are introspective, focusing on harnessing ideas and fostering intrapreneurship within an organization. In contrast, external hackathons look outwards, inviting ideas and participation from people both inside and outside the organization.

**online vs offline
hackathons**

Online hackathons break geographical barriers, allowing global participation, while offline hackathons focus on bringing people together in a physical space for more direct collaboration and networking.

**application-based vs
language-based hackathons**

Some hackathons focus on specific platforms or operating systems (like mobile or desktop), while others are centred around particular programming languages or APIs.

demographic-specific hackathons

These events target specific groups, like students or women, and are often accompanied by workshops and activities tailored to engage and empower the particular community.

code sprints vs industry-specific hackathons

Code sprints are intensive programming competitions, while industry-specific hackathons aim to drive innovation within particular sectors, leveraging established technologies and products.



SSD	Dimension	Characteristics			
	OI integration	idea generation	idea conversion	idea diffusion	
	Challenge design	technology-centric (API, software, hardware)	topic-centric (social issue, business problem)	data- centric (analysis, isualization,gathering)	
	OI integration	open	semi-structured	structured	
	Challenge design	focus on challenge output		focus on himan interaction	
ODD	Duration	short (<24 h)	medium(>24h -72h)	long (>72h)	
	Degree of elaboration	ideas and broad concepts	conceptual solutions	functional solutions	finished products/service
	Venue	physical	virtual	combined	
	Incentives	competition		collaboration	
	Targer audience	domain experts	(semi-) professionals	general public	
	Resources	provided	partially provided	not provided	

How to run a successful hackathon

CHAPTER
06



As we've explored so far, hackathons are dynamic, short-term events uniting individuals from various backgrounds and expertise in a concentrated effort to cultivate innovative ideas. The meteoric rise of hackathons across an array of sectors, from healthcare to aerospace, can be attributed to the unique opportunities they present. These events harness the collective, creative and intellectual prowess of the participants, fostering an environment where new relationships blossom, skills are honed, knowledge is expanded, and innovative solutions and processes are born. The success of hackathons lies in their ability to act as catalysts for collaboration and transformation, driving progress and igniting change across industries and communities alike. This melting pot of diversity and intensity makes hackathons a powerful tool for tackling complex challenges and uncovering groundbreaking solutions.

When NOT to host a hackathon

Although hackathons offer numerous advantages, it's equally crucial to discern when they might not be the appropriate avenue. If you're confronted with a specific challenge and your immediate thought is, "I need an app that does X", then a hackathon is likely not the right choice. Essentially, if the solution to your problem is already clear and well defined, it's more efficient to directly embark on building it yourself or engage a professional developer to craft it with you. Choosing the right tool for the right job is key, and there are instances where the collaborative, exploratory nature of a hackathon might not align with your precise, predetermined objectives.

Now, let's delve into the heart of this handbook, where we'll detail the essential steps required before, during and after a hackathon to maximize its effectiveness and impact. Each of the three phases – preparation (before), execution (during), and follow-up (after) – demands meticulous planning and management. Concentrating solely on the central hacking phase, without adequate attention to preparatory groundwork and post-event activities, could undermine all the effort and investment of the endeavour.



It's crucial to ensure that the entire organizing team is well prepared and fully understands the comprehensive plan for what will unfold across all three phases. Shared awareness of the needed commitment and coordinated effort is vital for the seamless execution and ultimate success of the hackathon.

BEFORE THE HACKATHON

- ☐ **Form and assign roles in the hackathon organize team**
a recipe for success
- ☐ **Craft the entry requirements**
streamlining hackathon participation
- ☐ **Choose a resonant and relevant theme**
the core of your hackathon's identity
- ☐ **Elevate hackathon communication**
crafting a compelling narrative
- ☐ **Define the challenge**
your hackathon's call to action
- ☐ **Streamline participant applications**
crafting an efficient and inclusive process
- ☐ **Set your hackathon's compass**
choose your goals and approaches
- ☐ **Optimize participant selection for a successful hackathon**
- ☐ **Establish a code of conduct**
- ☐ **Elevate the hackathon experience**
masterfully promoting the closing event
- ☐ **Design the agenda**
- ☐ **Navigate the legal maze**
intellectual property and legal considerations for your hackathon
- ☐ **Elevate your hackathon with expert speakers**
- ☐ **Maximize hackathon potential**
the power of a pre-hackathon session
- ☐ **Empower teams with mentorship**
- ☐ **Optimize your hackathon venue**
creating the perfect environment
- ☐ **Craft the hackathon prize strategy**

Forming and assigning roles in the hackathon organizing team: a recipe for success

The foundation of any successful endeavour, including organizing a hackathon, lies in assembling a **cohesive team**. It's crucial to foster a healthy, collaborative atmosphere where every team member feels welcomed, heard and valued. Clarity about each person's role and responsibilities ensures accountability and prevents any single member from becoming overburdened. Organizing a hackathon is a multifaceted and demanding undertaking; you must be well equipped to avoid overwhelming your team. Remember, the team's exhaustion can negatively impact the experience of participants and stakeholders.

Key roles in a hackathon organizing team:

- project manager
- participant and mentor recruiter
- administrative and logistics manager
- communication manager
- facilitator
- programme designer
- photographer/videographer/editor
- speaker/expert
- consultant
- mentor
- jury member
- partner
- hacker



As we explore each role in detail, it's important to note that while some roles can be fulfilled by the same individual, distinguishing the key tasks, skills and responsibilities is essential. This distinction helps prevent inefficiencies and confusion, ensuring a smooth and successful hackathon. The careful orchestration of roles and responsibilities is what turns the complex process of organizing a hackathon into a harmonious and successful event.

In the following sections, we will dive deeper into the specifics of each role, outlining the required skills and responsibilities to equip your team for the exciting journey of organizing a hackathon.

Project manager

The project manager is the cornerstone of the hackathon. This role is more than just overseeing tasks; the project manager strategically does not handle the specifics of the activities, but rather plays an active role in coordinating the activities, as well as being the representative face of the hackathon.

The project manager's responsibilities encompass:

- **setting clear objectives**
defining and articulating achievable goals that resonate with both the internal team and external stakeholders.
- **resource management**
overseeing the acquisition of all necessary resources, ranging from human capital to materials and information.
- **constraint management**
skilfully managing the hackathon's various constraints, including budget, timelines, scope, quality, and resolving conflicts.

In short, project managers must stay on top of every aspect and detail of the hackathon, as well as keep track of all the activities related to the planning of the event and the progress of the team.

In addition to these tasks, the project manager plays a crucial role in team building and motivation, ensuring that the organizing team is cohesive and driven. Utilizing and championing digital tools such as Trello, Basecamp, Slack and Asana is critical for efficient team coordination and minimizing ineffective micromanagement.

Participant and mentor recruiter

This role involves meticulously selecting participants and mentors who are integral to the hackathon's success. The tasks of the recruiter, often working closely with the project manager, are to:

- **define the profile**
outline the desired characteristics of participants and mentors, in terms of background, expertise and personality traits.
- **manage the application process**
oversee the application procedure and ensure a fair and thorough assessment of candidates.

Administrative and logistics manager

This role, working closely with the project manager, is pivotal in ensuring the smooth operation of the hackathon.

Responsibilities include:

- **venue and resource arrangement**
finding an appropriate event space and ensuring that all necessary resources are in place.
- **accommodation and transportation**
arranging these services for participants who are external to the organizing team, ensuring their comfort and convenience.
- **bureaucracy and documentation management**
handling all administrative tasks such as drafting and managing contracts, ensuring compliance with legal requirements, and maintaining thorough documentation of all organizational processes.
- **financial management**
overseeing the budget, managing expenses, and ensuring that financial transactions align with the hackathon's goals and constraints.
- **coordination of suppliers**
liaising with suppliers for services such as catering, equipment rental, and technology support, ensuring quality and timely delivery.
- **risk management and contingency planning**
identifying potential risks and developing contingency plans to address any unforeseen challenges during the event.

Communication manager

The communication manager is responsible for all aspects of hackathon communication, both digital and physical. Their role involves:

- **media coordination**
ensuring cohesive and comprehensive messaging across various platforms.
- **expert communication skills**
possessing deep knowledge of various communication tools and staying abreast of social media trends.

Facilitator

The facilitator is typically the host or co-host of the hackathon. The facilitator acts as the front-end representative during the hackathon.

They are responsible for:

- **agenda management**
possessing detailed knowledge of the event's schedule and goals, and ensuring that the hackathon runs on time.

- **community building**

creating a welcoming and inclusive atmosphere, facilitating discussions, and ensuring that every individual involved in the hackathon has a voice.

The facilitator is attentive to details, while always keeping in mind the big picture of the hackathon.

Programme designer

The programme designer's role is multifaceted and critical to the hackathon's success, requiring a strategic blend of creativity, foresight and practicality in shaping the overall structure and flow of the hackathon. Their responsibilities encompass crafting the overall programme and agenda, and ensuring its alignment with the hackathon's goals and the participants' needs.

Key responsibilities include:

- **balancing participant time pressure and opportunity for collaboration**

The programme designer must ensure that participants feel the urgency of a time-limited challenge while also providing them an ample opportunity for teamwork and collaboration.

- **avoiding overpacked agendas**

A carefully balanced agenda is crucial. While a rich programme can enhance the hackathon's appeal, it should not be at the expense of the participants' ability to develop substantial solutions. The agenda should stimulate creativity without overwhelming participants.

- **fostering the development of meaningful solutions**

It's essential that teams be allotted sufficient time to develop their ideas into tangible solutions, albeit imperfect. The aim is for teams to feel confident in presenting these solutions to a jury at the hackathon's conclusion.

- **ensuring the appropriateness of tools and approaches**

The programme designer needs to select methodologies and tools (like the double diamond approach or moonshot thinking) that are suitable for both the hackathon's audience and objectives. This requires a deep understanding of the hackathon's thematic focus and the participants' capabilities.

- **collaboration with recruiters and mentors**

In cooperation with the participant and mentor recruiter, the programme designer helps ascertain the right level of challenge and support based on the make-up of the participants and mentors.

- **providing guidance to other key roles**

The programme designer may also offer an overview and training to the facilitator, mentors and jury members, ensuring that everyone is aligned with the hackathon's framework and goals.

In their role, the programme designer orchestrates the rhythm and content of the hackathon, balancing the need for creativity, productivity and participant engagement. Their expertise in designing an effective programme is pivotal in transforming the hackathon from a mere gathering of ideas to a fruitful playground of innovative solutions. Depending on the hackathon's structure and resources, the responsibilities of the programme designer may sometimes overlap with those of the project manager or facilitator.

Photographers, videographers, editors

A hackathon, at its core, is an event that is rich in moments that are worth capturing in images. The role of the photographer and videographer is pivotal in making these moments enduring and impactful. These professionals transform the transient experiences of the hackathon into a lasting visual narrative. Their work is not just about recording; it's about storytelling and enhancing the event's presence in the minds of participants and the wider community.

This role involves:

- **comprehensive event coverage**

The photographer and videographer are responsible for capturing the essence of the hackathon through a mix of photos and videos. This coverage includes documenting key moments, participant interactions, the intensity of the hacking sessions, and the excitement of presentations and results.

- **multifaceted purpose of media**

The visuals serve multiple purposes. They are crucial for maintaining a repository and reporting on the event's progress and outcomes. Additionally, they play a significant role in communication and engagement strategies, both during and after the hackathon. This media is instrumental in narrating the hackathon's story to an external audience and keeping the participants engaged.

- **professional expertise**

A professional touch in photography and videography can significantly elevate the quality of the content. Their expertise ensures that the visuals are not just snapshots, but compelling representations of the hackathon's energy and spirit.

- **coordinating with the communication and project management teams**

Effective coordination with these teams ensures that the visuals align with the hackathon's overall communication strategy. This collaboration is vital for ensuring that the media reflects and enhances the hackathon's messaging and goals.

- **timely editing and social media adaptation**

Given the fast-paced nature of hackathons, the photographer and videographer need to provide edited content promptly, and in a format that is suitable for immediate sharing, particularly on social media. They should be adept at adjusting content to fit various social media platforms, considering the different format, style and length requirements.

- **equipment management**

Whether bringing their own equipment or using provided gear, it's essential to have clarity on what is available and what is needed. This clarity ensures smooth operation and high-quality output.

- **safe storage and sharing of media**

All media produced during the hackathon must be securely stored and accessible for future use. This material is invaluable for future hackathons, serving as a testament to the event's success and a tool for building reputation and credibility.

Before the event, it's crucial to distribute and obtain signed image use forms from everyone involved. This form should outline how images and videos will be used, ensuring that people are informed and that they consent to their images being captured and shared. This step is vital for respecting privacy and adhering to legal standards regarding image usage.

Speakers/experts

The speakers and experts at a hackathon play an integral role in enriching the event with their deep insights and knowledge. These individuals, who might be part of an existing network, or new contacts for a specific hackathon, are pivotal in driving the thematic depth and intellectual rigor of the event. The speakers and experts at a hackathon are more than just presenters; they are a vital source of inspiration, knowledge and real-world perspective. Their contributions significantly enhance the participants' learning experience, adding substantial value to the hackathon's intellectual and practical outcomes.

Key aspects:

- **alignment with the hackathon theme**

Their expertise and presentations must be in harmony with the hackathon's central theme, ensuring relevance and coherence of the content delivered.

- **role as challenge owners and collaborators**

In some cases, speakers and experts may also be the sponsors or partners of the hackathon. They may have had a hand in framing the challenges (referred to as “challenge owners”) and have a vested interest in the solutions developed. This involvement could extend beyond the hackathon, providing opportunities for funding, networking, prototyping and more.

- **contribution beyond presentations**

Their engagement isn't limited to keynote speeches or panel discussions. These experts can also be instrumental in subsequent phases of the hackathon, offering resources through their affiliations with various programmes and institutions, like incubators or accelerators.

- **diverse expertise**

Typically, they include:

- **policymakers** – Offering insights into the political and institutional implications of the hackathon's challenges, they can provide a broader context to the issues at hand.
- **scientists and academics** – Contributing deep technical knowledge and cutting-edge research relevant to the hackathon's theme, they are instrumental in addressing more complex technical queries from participants.
- **entrepreneurs and business owners** – Those who have pioneered innovative solutions in the field of hackathons can present case studies, while others facing similar challenges can offer a practical perspective.

Consultants

Consultants are often brought in for their unique expertise and skills in specific areas, such as programme design or strategic planning. They serve as an external resource, augmenting the capabilities of the core organizing team.

Key aspects:

- **specialized expertise**

Consultants offer a depth of knowledge and experience in particular domains relevant to the hackathon. Whether it's for programme design, strategic guidance, or technical expertise, they provide insights that might not be available within the existing organizing team.

- **role clarity and contractual agreements**

To foster a productive and clear working relationship, it's crucial to explicitly

define the consultant's role, responsibilities and tasks. This should be formalized in a comprehensive contract or letter of engagement. Such documentation helps set clear expectations and avoid any potential misunderstandings or disappointments.

- **task-specific involvement**

Depending on the hackathon's needs, a consultant might be responsible for handling specific event tasks. For example, they could assist in refining the hackathon's programme, ensuring that it aligns with the event's objectives and themes. Alternatively, they may provide targeted advice on particular challenges faced during the planning and execution phases.

- **enhancing event capabilities**

The consultant's involvement is particularly valuable when it comes to areas where the organizing team lacks expertise. In addition to bringing a fresh perspective, they can also introduce new methods and strategies that enhance the overall quality and impact of the hackathon.

- **collaborating with the core organizing team**

Effective communication and collaboration with the organizing team are imperative. Consultants should work in tandem with the team, complementing their efforts and contributing to the event's collective success.

Mentors

Mentors play an indispensable role in the framework of a hackathon, offering a wealth of expertise and guidance. Their involvement is a blend of advisory support and practical assistance, helping teams navigate the complexities of the hackathon's theme and steer their ideas towards tangible outcomes.

Key aspects:

- **diverse expertise**

Mentors bring varied skills and knowledge relevant to the hackathon's theme. This diversity can include technical specialists, successful entrepreneurs, legal advisors and more. For instance, a mentor with a background in entrepreneurship can provide insights into business challenges and solution scalability, while a legal expert might guide teams on intellectual property matters.

- **types of mentors**

Typically, mentors can be categorized into two groups:

- **subject matter experts** – These mentors have specialized knowledge in specific areas relevant to the hackathon's challenges. They provide

technical guidance, industry insights and practical advice based on their expertise and experience.

- **generalist mentors** – These individuals are well versed in the hackathon process itself. They offer guidance on the use of tools, methodologies and strategies that are integral to the hackathon. Their role is to ensure that teams are effectively utilizing the resources available to them and that they are on track with the hackathon's guidelines and objectives.

- **role clarity and briefing**

It is essential for mentors to clearly understand their role, not as decision-makers for the teams, but as facilitators and advisors. A thorough briefing before the event is crucial to align their understanding with the hackathon's goals and to clarify their supportive role in guiding the teams.

- **collaborating with organizers and teams**

Mentors work closely with the hackathon organizers to understand the event's objectives and structure. They also collaborate with the teams, providing tailored guidance that aligns with each team's unique needs and the hackathon's overall thematic direction.

- **empowering participants**

The primary goal of mentors is to empower participants, helping them refine their ideas and translate them into viable solutions. This involves encouraging creativity, providing constructive feedback, and helping teams overcome technical and conceptual challenges.

- **helping to facilitate the hackathon process**

Mentors assist in ensuring that teams are keeping pace with the hackathon schedule and prepared for key milestones, such as pitch presentations and evaluations.

Jury members

Jury members in a hackathon hold the significant responsibility of evaluating team pitches and determining the event's winners. Their role is critical in ensuring a fair and objective assessment of the solutions presented.

Key aspects:

- **objective assessment**

Ideally, jury members should not have prior close involvement with the participating teams to maintain impartiality and prevent preconceived biases. This detachment ensures that their evaluation is based solely on the presentations and content delivered during the hackathon.

- **balancing roles**

In educational hackathons, it's common for individuals to serve as both mentors and jury members. This dual role can be beneficial, as these individuals have witnessed the teams' developmental journey, allowing them to make more informed assessments based on how the ideas evolved and were executed.

- **diverse expertise and appeal**

The composition of the jury can significantly enhance the hackathon's appeal and outcomes. Including celebrity judges or industry leaders can increase the event's attractiveness, motivating participants to present their ideas. Judges who are experts in the hackathon's theme or challenge areas bring depth to the evaluation process, assessing the technical and practical aspects of the solutions.

- **challenge owners as judges**

Sometimes, judges are also the challenge owners or stakeholders who have a vested interest in the solutions being developed. Their involvement can lead to a higher likelihood of solution implementation post-hackathon, as they may select the ideas they are keen on investing in or developing further.

- **pre-briefing and criteria outline**

It's essential to brief jury members on their role and the evaluation criteria beforehand. Clear, merit-based criteria should be established, potentially assigning percentage weights to different aspects. The facilitator should communicate these criteria to participants at the start of the event. Including the criteria in the hackathon's internal communication materials also ensures transparency. These can include:

- **innovativeness**
- **feasibility**
- **impact**
- **pitch quality**

Partners

Partners play a crucial role in the success of a hackathon by providing a wide array of resources that are essential for executing and enhancing the event. Their contributions can significantly elevate the quality and scope of the hackathon.

Key aspects:

- **diverse resource contributions**

Partners can support the hackathon in various ways, including providing

funding, food, prizes, event space, technical gadgets and more. Their contributions can also extend to offering expertise through speakers, mentors, or industry experts, adding substantial value to the event.

- **communication and visibility**

The communication manager plays a vital role in ensuring that partners are appropriately acknowledged in all hackathon-related materials. This includes displaying partners' names and logos correctly across all communication platforms and promotional materials, adhering to any specific branding requirements.

- **acknowledgement during the event**

The hackathon facilitator should be well informed about all partners and their contributions to give them proper acknowledgement during the event. This recognition can occur at various stages, such as during the opening introduction, in closing remarks, and when expressing gratitude. Such acknowledgements not only show appreciation, but also reinforce the partners' importance to the event.

- **formalizing partnerships**

Drafting letters of intent or partnership agreements can formalize the collaboration between the hackathon organizers and partners. These documents clarify the expectations and commitments on both sides, enhancing the professional credibility and reputation of the hackathon.

- **leveraging word of mouth**

Engaging with partners can often lead to further networking opportunities. Encouraging partners to share their involvement can attract additional collaborators, expanding the reach and resources of the hackathon.

- **building long-term relationships**

Establishing and maintaining strong partnerships is beneficial for the current event and can also pave the way for future collaborations. Nurturing these relationships can lead to ongoing support and resources for subsequent hackathons.

Hackers

Hackers are the very lifeblood of a hackathon – they are the dynamic and creative force that can transform hackathons with their enthusiasm and inspiring motivation. Key aspects:

- **hacker-centred hackathon**

Hackers are not just participants; they are the central players. Their active involvement and engagement are what make a hackathon successful and meaningful.

- **diversity and variety**

It's crucial to encourage a diverse group of participants. The richness of a hackathon is significantly enhanced by the variety of its hackers. This diversity can be manifested in skills, perspectives and experiences.

- **inclusivity and engagement**

Ensuring that the hackathon environment is inclusive and engaging for all participants is key. Every stage of the hackathon should be designed with the hackers in mind, from the initial ideation to the final presentations.

- **a wide range of skills and expertise**

The ideal group of hackers should include a broad spectrum of talents and skills to effectively tackle the challenges.

This group might include:

- **software developers** – bringing technical expertise and coding skills that are essential for developing digital solutions;
- **graphic designers and UX/UI designers** – offering critical insights into user experience and visual communication;
- **policy analysts** – providing an understanding of regulatory and policy implications;
- **lawyers** – offering legal perspectives, that are especially useful for navigating intellectual property issues;
- **businesspeople and entrepreneurs** – contributing business acumen and insights into market feasibility; and
- **data scientists** – providing the ability to analyse and interpret complex datasets.

- **collective problem-solving approach**

A hackathon thrives on the collective effort of hackers to think outside the box and approach challenges from unique angles. Encouraging collaboration and the exchange of ideas among participants is essential.

- **recognition and support**

Acknowledging the efforts and contributions of hackers is important. Providing them with the necessary support, resources and encouragement ensures that they can fully engage and bring their best to the hackathon.

Teams

The formation of teams is a crucial element in the structure and success of a hackathon. It sets the stage for how participants collaborate, innovate and approach the hackathon. The strategy for team formation can vary based on the hackathon's objectives and the desired dynamics among participants. Particularly, teams can be formed before the hackathon, or directly at the hackathon venue.

Forming teams before the hackathon:

- **procedure**

This method usually involves setting a registration deadline one to two weeks before the hackathon.

- **advantages**

Pre-formed teams can start brainstorming and planning their approach in advance, saving time during the hackathon for focused development.

- **challenges**

Late discoverers of the hackathon may miss out on participating, and no-shows can disrupt team dynamics.

- **facilitation**

Organizers can facilitate pre-event team formation through events like meetups, or using online platforms like Slack or Discord, allowing participants to connect and form teams.

Forming teams during the hackathon:

- **procedure**

In this approach, teams are formed at the beginning of the hackathon, often facilitated by a designated team formation leader.

- **advantages**

It ensures the inclusion of all attendees and allows participants to form teams based on mutual interests and complementary skills discovered onsite.

- **challenges**

It can be time-consuming, potentially reducing the actual working time on the hackathon projects.

- **facilitation**

Designated areas for different challenge themes can be set up, helping participants to find others with similar interests. A facilitator can guide this process, making it more efficient.

Tailoring team formation to hackathon objectives:

- **for entrepreneurial skill development**

Encouraging self-formation of teams by participants can be beneficial. It allows them to exercise their leadership and team-building skills, enhancing the entrepreneurial experience of the hackathon.

- **for corporate hackathons**

In scenarios where the aim is to foster collaboration across different departments of a company, it might be advantageous for the organizing team to form balanced teams. This ensures a diverse mix of skills and knowledge, promoting cross-functional collaboration and innovation.

Considerations for effective team formation:

- **balancing skills and expertise**

Whether teams are pre-formed or created during the event, it's important to ensure a balance of expertise in each group to maximize the potential for innovative solutions.

- **encouraging diversity**

Diversity, in terms of professional backgrounds, experience levels and perspectives can greatly enrich the problem-solving process.

- **flexibility and adaptability**

Organizers should be prepared to assist in team formation, ensuring that all participants are included and that teams are well equipped to tackle the hackathon's challenges.

Role	Responsibilities	Required skills
Project manager	Supervise the planning, procurement and execution of the hackathon project	Leadership Communication Organization Critical thinking Problem-solving Emotional intelligence
Participant and mentor recruiter	Define entry requirements Select participants Recruit mentors	Curiosity Empathy Patience Listening
Administrative and logistics manager	Handle all administrative and logistics aspects related to the event (space, transport, supplies, documents...)	Organization Precision Problem-solving
Communication manager	Supervise the communication of the hackathon in all its phases	Confidence Writing Editing Layout and design Verbal presentation
Facilitator	Facilitate and conduct the hackathon event during the hacking days	Communication Empathy Emotional intelligence Flexibility
Programme designer	Design the programme and approach of the hackathon (agenda, tools, activities...)	Organization Design Critical thinking Pedagogy
Photographer, videographer, editor	Take photos and videos of the event and edit the material	Communication Photography Videography Layout and design Editing
Speaker/expert	Speak about the theme and challenges at the hackathon	Communication Topical expertise

Consultant	Consultations and support on specific tasks or phases of the hackathon	Organization Topical expertise
Mentor	Support and guide teams during the hackathon	Empathy Emotional intelligence Topical expertise Communication Patience Critical thinking
Jury member	Ask questions during the Q&A session after the pitch Evaluate the final pitches and determine the hackathon winners	Critical thinking Communication Topical expertise
Partner	Support the hackathon through a specific partnership agreement	Organization Emotional intelligence
Hacker	Form a team to hack the challenge and pitch the solution at the end of the hackathon	Entrepreneurship Curiosity Flexibility Patience Empathy Teamworking Openness to learn

Choosing a resonant and relevant theme: the core of your hackathon's identity

Embarking on a hackathon journey begins with the crucial step of deciding on a theme. This is more than just a topic; it's the heartbeat of your event, setting the stage for every idea, project and collaboration that will unfold. Select a theme that sparks your interest and also resonates deeply with current public challenges. In the agrifood sector think of pressing issues that stir public discourse and action – like the ever-evolving landscape of the urgency for climate-change action, the critical concern over food waste, non-communicable diseases (NCDs) and malnutrition, or digitalization in agriculture. By aligning your hackathon theme with such vital societal issues, you create a platform that is not only relevant, but also rich in opportunities for meaningful innovation and solutions.



Consistency is key. Consider maintaining your chosen theme over a set period, for example for a series of hackathons. This approach allows for deeper exploration of the theme and enables participants to build upon existing ideas and projects. Moreover, it creates a sense of continuity and focus, which are both essential in nurturing an environment of sustained innovation and engagement.

Moreover, think about connecting your hackathon to a series of related and broader initiatives (World Food Day or World EXPO), all under the umbrella of your chosen theme. This linkage can amplify the impact of your event, creating a ripple effect that extends beyond the hackathon itself. It fosters a community of practice, where ideas and solutions can evolve and grow, guided by the steady light of your theme. By thoughtfully choosing and consistently implementing your theme, your hackathon transforms into more than just an event. It becomes a platform for change. This strategic choice is not just about setting a topic; it's about igniting a movement, one hackathon at a time.

Defining the challenge: your hackathon's call to action

Once you've set your hackathon's theme, the next pivotal step is to define specific and actionable challenges that align with this theme. This isn't just about picking a problem; it's about setting a course for innovative exploration. The challenge you choose is the call to action that resonates with every participant, urging them to push boundaries and create change.

Ultimately, a hackathon aims to “hack” or tackle something that is not working well and is crying out for novel solutions. The definition of the challenge is one of the most crucial moments of a hackathon and can drive its success or failure.

When it comes to crafting challenges, there's a delicate art to balance. Let's find out why and how.

Avoid the trap of being too narrow or prescriptive. If your challenge is too constricted, you risk stifling creativity and ending up with a parade of predictable, similar solutions. Instead, aim for a broad, open-ended challenge that invites participants to unleash their creativity and think outside the box. The goal is to spark a diverse spectrum of ideas and solutions, each addressing the challenge from unique angles and perspectives.



Consider presenting a range of two to five challenges within your overarching theme. This strategy caters to diverse talents and interests, providing teams with multiple avenues to showcase their strengths and passions. You might also include an “open” or “wild card” category, specifically designed for those exceptionally creative, out-of-the-box submissions that defy conventional categorization.



During your hackathon, encourage participants to break down these broad challenges into specific, localized issues. This approach ensures that the solutions developed are not just innovative, but also relevant and responsive to real-world contexts. Encourage teams to consider how their solutions might apply or need adaptation in their local environments or communities. This localized focus increases the potential impact and applicability of the hackathon outcomes.

By carefully defining your hackathon challenges, you set the stage for impactful innovation. You're not just asking participants to solve a problem; you're inviting them to embark on a journey of discovery, creativity and real-world impact that will ideally start at the hackathon venue, and then continue for a very long time. The challenges you set are the seeds from which groundbreaking ideas and solutions will grow, nurtured by the talent and passion of your participants and ecosystem.

Setting your hackathon's compass: choose your goals and approaches

When orchestrating a hackathon, one of the most strategic decisions involves choosing your goal and approach. This is akin to setting your event's North Star; it guides every aspect of the hackathon, from the structure and activities to the criteria for success. Hackathons can adopt various approaches, each with its unique flavour and potential outcomes. For instance, a design-thinking approach focuses on empathetic, user-centric problem-solving, while a lean methodology emphasizes rapid prototyping and iterative development. These approaches shape the environment and mindset of your hackathon, influencing how participants will tackle challenges and innovate.

Hackathons can have a spectrum of objectives. Some aim to cultivate and refine participants' skills, which is perfect for those looking to explore new technologies or methodologies. Others might focus on entrepreneurial outcomes, serving as launchpads for new businesses or start-ups. And then there are those hackathons that act as breeding grounds for policy-shaping solutions, addressing societal or environmental issues. The beauty of a hackathon lies in its versatility; it can be a playground for skill development, a hatchery for new businesses, or a think tank for policy solutions.

A crucial step is to clearly define your primary purpose in the design phase. This decision shouldn't be an afterthought; it's the foundation upon which your hackathon is built. It determines the kind of challenges you set, the type of participants you attract, and the metrics you use to measure success.



In defining your goal, ponder these questions: What is the overarching purpose of the hackathon? What are we aiming to achieve? How will we define and measure success? These questions will help you crystallize your objectives and set the stage for a focused and impactful hackathon. Choosing your goal and approach is about crafting a hackathon that resonates with purpose and clarity. It's about aligning your event with the aspirations and needs of your participants

while staying true to your vision. Whether it's fostering innovation, nurturing skills, or seeding future policies, your hackathon's goal is the beacon that guides every decision, ensuring a focused, meaningful and successful event.



Set the **key performance indicators (KPIs)** and **objectives and key results (OKRs)** for your hackathon.

KPIs and OKRs

Once your goal is clear, defining the expected key performance indicators (KPIs) becomes crucial. These KPIs are your measuring sticks, helping you gauge the effectiveness and impact of your hackathon. They should align with your overarching goal, whether it's the number of viable prototypes developed, the skills participants acquire, or the potential policy implications of the solutions proposed. By aligning your KPIs with your hackathon's purpose, you ensure that every element of your event is geared towards achieving your desired outcome.

Also, in the intricate dance of planning a hackathon, weaving in both KPIs and OKRs can elevate your event's strategic planning to a new zenith. While KPIs offer a way to measure performance against set goals, integrating OKRs brings in a layer of aspirational objectives aligned with tangible outcomes. This blend not only drives performance but also ensures that your hackathon sails towards its true north with clear, actionable objectives.

Objectives and key results come into play as a powerful tool in defining and communicating the overarching goals of your hackathon. They are about setting ambitious, yet achievable objectives, paired with concrete, measurable key results. This framework encourages thinking big, pushing boundaries, and striving for impactful, quantifiable outcomes. For instance, an objective could be *"To foster groundbreaking innovations in agritech"*, with key results like *"Develop ten viable prototypes addressing sustainable farming practices"* or *"Engage five industry leaders as mentors for participant teams"*.

While KPIs keep you grounded, tracking the performance and efficiency of your hackathon, OKRs elevate your vision, setting the stage for breakthrough achievements. By incorporating OKRs, you not only quantify success, but you also align your hackathon's efforts with broader, more ambitious goals. This dual approach ensures that while the hackathon is operationally sound (tracked by KPIs), it is also making strides towards significant, transformative objectives (guided by OKRs).



When weaving OKRs into your hackathon's fabric, consider these pivotal questions: What are our most ambitious goals for this hackathon? What impactful outcomes do we aspire to achieve? What specific, measurable results will indicate we are making progress towards these goals? Answering these will help you craft OKRs that are not just inspiring but also grounded in the reality of what your hackathon can realistically achieve.

Incorporating OKRs alongside KPIs in your hackathon planning is like setting both a compass and a star to navigate. The KPIs keep you on track, ensuring you're moving in the right direction, while the OKRs push you to reach higher, aspire more, and achieve transformative outcomes. This combination ensures that your hackathon isn't just a gathering of minds but a focused drive towards meaningful, measurable change. It's about creating an environment where aspiration meets action, where lofty goals find their grounding in tangible results.

Establish a code of conduct:

The essence of a successful hackathon transcends beyond just ideation and problem-solving; it's also about cultivating a harmonious, respectful and inclusive atmosphere. A meticulously crafted code of conduct stands as a cornerstone in achieving this, setting clear expectations for behaviour and interaction among all participants. Let's explore the critical elements that make a code of conduct not just a set of rules, but a charter for fostering a positive, collaborative environment.

The code of conduct serves as a guide, ensuring that every participant navigates the hackathon waters with respect and consideration. It's about creating a space where:

- **diversity and expression are celebrated**
Everyone, irrespective of their background, has the liberty to voice their ideas and opinions without fear of bias or harassment. This ensures a melting pot of perspectives, enriching the hackathon experience.
- **contributions are valued**
Every idea, skill and contribution are not just acknowledged, but also valued. This principle nurtures an environment where creativity flourishes, and everyone feels their input is worthwhile.
- **respectful dialogue is fostered**
Encourage participants to listen actively and engage in respectful discourse. Questions should be posed with a genuine intention to understand and build upon ideas.
- **constructive interaction is embraced**

Adopt a “yes, and” approach, where ideas are met with openness and a constructive mindset, rather than a dismissive “no, but” attitude. This fosters a culture of building on each other’s thoughts, enhancing collaborative innovation.

- **the aim is meaningful impact**

Steer the hackathon’s intellectual journey towards generating ideas that are not just innovative, but also socially responsible, ethical and empowering.

The organizers play a pivotal role in upholding the code of conduct. They are not just enforcers, but also guardians of this ethical framework. They hold the authority to take the necessary actions against anyone who breaches these guidelines, ensuring that the hackathon remains a safe and positive experience for all. Participants are encouraged to reach out to organizers for any concerns or issues, guaranteeing an open channel for communication and problem resolution.

Hackathons are anchored in creating an environment that supports meaningful collaboration, characterized by safety, respect and inclusivity. The code of conduct highlights the following principles:

- Hackathons allow all participants to freely express their ideas and identities without the threat of discrimination or harassment. It is a space where diversity is not only welcomed, but also celebrated.
- Hackathons recognize and value the ideas, skills and contributions of each participant. They emphasize the importance of collective intelligence and the unique strengths that everyone brings.
- At hackathons, active listening and respectful dialogue are fundamental. Participants are encouraged to engage in conversations that are constructive and considerate.
- The hackathon culture promotes an approach of “yes, and” rather than “no, but”. This fosters an environment of positive reinforcement and collaborative problem-solving.
- The ideas generated during hackathons aim to empower participants, driving innovation, and creating a positive impact. Hackathons are not just about generating ideas, they are also about making a meaningful difference.



A common note to be included in a hackathon's code of conduct: "In upholding the integrity of our event's code of conduct, the organizing team maintains the authority to disqualify any participant who breaches these guidelines. We encourage open communication, so please feel free to reach out to the organizers if you have any concerns or wish to discuss any issues."

By establishing this code of conduct, the hackathon transforms into more than a mere event; it becomes a microcosm of harmonious, respectful and impactful collaboration. This code is a testament to the values of diversity, inclusivity and constructive interaction.

Harnessing the power of collaboration: find a partner and sponsor

In the world of hackathons, the synergy created by partners and sponsors isn't just beneficial – it's essential. These collaborators can bring a wealth of resources to the table, ranging from financial support to expert human resources, essential materials, and even the venue. Their involvement can transform a good hackathon into a great one, providing the necessary ingredients for success.

Partners and sponsors may join a hackathon for a myriad of reasons. For some, it's a chance to delve into open innovation, using the hackathon as fertile ground for brainstorming solutions to challenges they've been grappling with internally. This approach turns the hackathon into a dynamic hub of inbound open innovation, where fresh ideas are generated and explored. For others, a hackathon represents the first step in a potentially long-term collaborative journey. This initial engagement can plant the seeds for future partnerships, fostering a network of cooperation that extends well beyond the event itself. Sometimes, the involvement of partners and sponsors is more exploratory in nature. They might see the hackathon as a platform for exposure, a chance to test the waters of this unique collaborative environment, and gauge the potential for future, deeper involvement.

Regardless of their motivations, it's crucial to clearly define what partners and sponsors can expect from the hackathon, and what they are expected to contribute. This mutual understanding is vital for a harmonious collaboration. Their support can elevate the hackathon's profile, attract additional partners and sponsors, and draw in participants, mentors and volunteers who are eager to be part of this innovative initiative.

Including the partners' and sponsors' logos on hackathon materials, such as the website or application forms, not only gives them deserved recognition but also enhances the appeal of the hackathon to potential applicants. In some instances, formalizing the relationship with a written agreement can clarify commitments and roles, aiding in pitching the event to other potential stakeholders and ensuring internal clarity on partnership terms.

Partners and sponsors can play a variety of roles in a hackathon, each contributing to its success in different ways:

- securing a suitable venue for the event;
- providing food, snacks and beverages to keep participants energized and focused;
- offering prizes that add a competitive edge and incentive for innovation;
- supplying mentors, speakers and jury members who bring expertise and credibility;
- enhancing the visibility of the hackathon through their networks and channels;
- boosting the overall reputation of the hackathon, lending it prestige and reliability;
- co-designing challenges, ensuring they are relevant, challenging and aligned with real-world issues;
- granting post-hackathon access to incubators and accelerators;
- providing cutting-edge gadgets and technology; and
- supplying software and digital platforms tailored to the hackathon's needs



To find the right partners and sponsors, focus on entities whose goals and values align with those of your hackathon.

Potential collaborators can be found among:

- local businesses interested in community engagement and innovation;
- tech companies looking to foster technological advancements;
- government agencies and municipality offices focused on civic and societal challenges;
- food, beverage and agricultural companies, especially those focused on sustainability and health;
- venture capitalists, foundations and philanthropists who invest in innovation and social impact; and
- non-profit organizations and community partners seeking to address specific societal issues.

By carefully selecting and engaging with the right partners and sponsors, you set the stage for a successful hackathon that also resonates with real-world impact and fosters a thriving community of innovators.

Design the agenda:

Crafting a well-structured agenda is a cornerstone of a successful hackathon. It's not just about timing; it's about creating a rhythmic flow that encapsulates moments of vibrant inspiration, intense focus, collaborative teamwork, invigorating fun, and essential stress relief. The blueprint of your agenda should resonate with the chosen format and approach of your hackathon, ensuring that every element aligns perfectly with your overarching vision.

A hackathon typically lasts between 24 and 72 hours.

This time frame is your canvas, and it's crucial to proportionally allocate time to each segment, maintaining a harmonious balance.

When planning the length, keep in mind your target audience. How much time will they need to not only meet the challenge, but also develop meaningful, impactful solutions and cultivate connections? The goal is to strike a perfect balance: sufficient time to foster the germination of ideas and development of prototypes, yet compact enough to maintain excitement and challenge.



While younger participants might revel in an extended hackathon, professionals with family obligations might prefer shorter, more intense formats.

When designing your hackathon's agenda, consider these key factors for optimal success:

- **duration**

While longer hackathons (two to three days) require more extensive planning and resources, they afford participants ample time to develop well-thought-out ideas and prototypes.

- **weekend scheduling**

Many hackathons, excluding those in corporate or educational contexts, are ideally held over weekends. This timing avoids conflicts with work or school commitments, ensuring broader participation.

- **timing**

Scheduling hackathons near public holidays can be risky due to potential conflicts with personal plans. Assess your target audience's availability to decide.

A good hackathon agenda usually includes at least the following elements:

- an opening
- teamworking
- mentoring slots
- pitching
- jury evaluation
- announcement of winners and feedback

A well-orchestrated hackathon agenda typically includes these essential phases:

- **an opening**

This is where the adventure begins. Introduce the hackathon's unique aspects, including the main challenge, subchallenges, rules, and the team behind the event.

- **teamworking**

At the heart of the hackathon, participants dive into the crux of the event, collaborating within teams to "hack" the challenge.

- **mentoring slots**

These are pivotal moments where teams engage with mentors for invaluable feedback and guidance, fine-tuning their ideas and strategies.

- **pitching**

A critical phase where teams present their innovative solutions, showcasing their creativity and hard work.

- **jury evaluation**

An expert jury assesses the solutions, bringing their professional insights to evaluate the effectiveness and innovation of each proposal.

- **announcement of winners and feedback**

The climax of the event, where winners are celebrated, and constructive feedback is provided, setting the stage for future endeavours.

Remember, these elements are not just sequential steps; they are the building

blocks of an unforgettable hackathon experience, each contributing uniquely to the overall journey. The magic lies in how these phases are woven together to create an engaging, productive and memorable event.

Elevating your hackathon with expert speakers

Securing expert speakers is a game changer in setting the thematic tone and direction for your hackathon. These speakers, ranging from policy mavens to industry leaders, academics, or seasoned entrepreneurs, impart crucial insights that align with your hackathon's theme and objectives. For instance, educational-focused hackathons may feature academic experts who blend pedagogical nuances into their talks, whereas business-centric events might spotlight entrepreneurs with compelling success stories.

Key roles of expert speakers:

- **knowledge dissemination**
They offer a deep dive into the hackathon's challenges, armed with data, statistics and unique perspectives.
- **inspiration and guidance**
Their presentations not only inform, but also inspire, providing a launchpad for the participants' creativity and problem-solving.
- **interactive engagement**
Allocating specific time slots for presentations and Q&A sessions ensures interactive and dynamic learning. These sessions are vital for participants to seek clarifications, gain additional insights, and receive targeted advice.

Strategic speaker involvement:

- **balanced content**
Ensure a diversity in topics and speaking styles to maintain participant engagement throughout the event.
- **promotional integration**
Feature your speakers in promotional materials to leverage their networks and enhance the hackathon's visibility.
- **pre-event coordination**
Organize pre-hackathon meetings with speakers to synchronize content, foster complementary discussions, avoid repetition, and brainstorm innovative ideas. This is also an opportunity to align on the panel's format and address the speakers' expectations.

By thoughtfully integrating expert speakers into your hackathon, you elevate the event's educational value, foster inspiration, and drive meaningful engagement.

Empowering teams with mentorship

In the dynamic world of hackathons, mentors are the guiding stars, playing a pivotal role in steering teams towards success and insightful learning. The essence of mentorship in this context is to nurture, facilitate and inspire rather than to lead from the front.

Mentors promote the success and learning journey of the teams. The role of mentors is to support teams, provide tools, and encourage experimentation and reflection.

Key aspects of effective mentorship:

- **support and guidance**
Mentors are the scaffolding that supports the teams, offering tools and wisdom while encouraging exploration and reflection.
- **role clarity**
It's essential that both mentors and participants understand the mentor's role as a facilitator, not a team member. Their goal is to foster an environment that is conducive to learning-by-doing, not to direct or dominate the project's development.
- **encouraging exploration**
Effective mentors understand the value of trial and error. They encourage teams to embrace missteps as vital learning opportunities, steering away from a prescriptive approach.

Diversity in mentorship:

- **subject expert mentors**
These mentors bring specialized knowledge related to the hackathon's theme or specific solution aspects, like business models or user experience. They are invaluable in providing in-depth insights and technical guidance.
- **process expert mentors**
Alternatively known as generalist mentors, they focus on the broader hackathon journey. They guide teams through the phases from ideation to implementation, advising on tool usage, pitch preparation, and strategic decision-making.



The relationship between mentors and participants often extends beyond the hackathon, laying the foundation for ongoing support and growth. This enduring connection can be a vital resource for the teams as they evolve their ideas into tangible outcomes.

By strategically recruiting a diverse mix of mentors, hackathons can ensure that the teams are equipped to tackle the challenges at hand and also nurtured to develop skills and insights that last well beyond the event.

Crafting the hackathon prize strategy

Selecting the ideal prizes for your hackathon is more than just an incentive; it's a strategic decision that shapes the experience and outcomes of your event. Hackathon prizes are a powerful tool to motivate, inspire and reward the hard work and creativity of participants.

Hackathon awards should be selected considering:

- available resources
- relevance to theme
- participant motivation
- impact alignment

Aligning prizes with hackathon objectives:

■ **variety of motivations**

Participants are drawn to hackathons for diverse reasons: from learning and networking to experimentation and fun. Recognize these motivations in your prize strategy.

■ **range of rewards**

Prizes can range from symbolic (like certificates of achievement) to substantial (such as cash awards). The key is to match the prize to the hackathon's spirit and goals.

■ **resource-based decision**

Consider the resources at your disposal. Align prizes with what's feasible, keeping in mind the hackathon's overarching message and purpose.

■ **attract and motivate**

Choose awards that will entice participants and spur them to put forth their

best ideas. Your prize should be a beacon that draws in talent and effort.

- **coherence with theme**

Ensure that prizes resonate with the hackathon's theme. For instance, in a sustainability-focused hackathon, prizes should embody sustainable principles.



Consider long-term impact prizes that offer sustained benefits, instead of one-time rewards.

Long-term impact prizes:

- **developmental awards**

Consider prizes that offer long-term value, such as funding for prototyping, access to maker spaces, or entry to incubator programmes. These can significantly propel winning ideas from concept to reality.

- **value-added vouchers**

Offer vouchers for mentoring hours, business consultancy, or specialized training. These can provide continued support and growth opportunities for participants.

- **strategic partnerships**

Prizes offering research trips or meetings with potential investors can open doors for future collaborations and growth.

Communicating the prize effectively:

- **purposeful messaging**

Clearly communicate the nature and value of the prizes. This clarity not only attracts participants, but also sets the tone for the level of competition and innovation that is expected.

- **representative rewards**

Ensure that the prize reflects the essence of the hackathon. If your event promotes a specific cause or ethos, the prize should be a testament to those values.

By thoughtfully deciding on the hackathon prizes, you reward the participants' efforts and also reinforce the core objectives and themes of your event, making it a more enriching and memorable experience for everyone involved.

Crafting the entry requirements: streamlining hackathon participation

The gateway to your hackathon starts with a clear and tailored entry process. It's crucial to align your entry requirements with the hackathon's theme, methodology

and objectives. Here's a guide to refining your entry strategy:

- **idea requirement**

Determine if participants should come armed with ideas or if the hackathon will provide the inspiration. This decision shapes the dynamics and flow of your event.

- **team dynamics**

Decide whether to welcome individual innovators, pre-formed teams, or a blend of both. This choice influences the collaboration and networking aspects of your hackathon.

- **participant profile**

Identify the key personal and professional traits that will make the participants a perfect fit for your hackathon's goals. Look for a blend of skills and experiences that will enrich the collaborative process.

- **application methodology**

Choose a streamlined application process. A comprehensive form could be your go-to option, capturing essential details from aspiring participants. Consider asking for resumes or portfolios for a deeper understanding of each applicant's background.

- **motivational insight**

Enhance the selection process with a short video submission. This step encourages applicants to express their enthusiasm and vision, allowing for a peek into their motivation and commitment levels.

When shaping the entry requirements for your hackathon, ponder these questions:

- Should participants arrive with a preconceived idea, or will ideas be developed during the hackathon?
- Are you welcoming applications from individuals, pre-formed teams, or both? This decision can significantly influence the dynamics and outcomes of your event.
- What blend of personal and professional attributes are you seeking in participants?



Aim for a rich tapestry of participants. The success of hackathons often hinges on the varied perspectives and skills that each participant brings. Strive for a balance that sparks innovation through diversity.

Remember, the entry process is not just about selecting participants; it's about setting the tone for your hackathon and ensuring that it starts on a high note with the right mix of talent and enthusiasm.

Elevating hackathon communication: crafting a compelling narrative

In the world of hackathons, your communication strategy is as vital as the event itself. It's the bridge that connects your hackathon with the outside world, drawing in participants, sponsors and partners.

Effective communication is crucial for attracting participants, sponsors and partners, and for generating interest and media coverage. Use communication materials to visually amplify and convey your key messages.

Here's how to master the art of hackathon communication:

- **branding with visuals**
Create a standout hackathon icon or image that encapsulates the essence of your event. This visual anchor becomes the face of your hackathon, weaving the theme and challenge into its design.
- **versatile flyers**
Develop an engaging flyer, versatile enough for both digital distribution and traditional print, ensuring maximum reach.
- **impactful banners**
Design eye-catching banners for digital platforms, such as your website and email signatures, to constantly reinforce your hackathon's presence.
- **social media savvy**
Tailor social media pictures to suit the varied dimensions and styles of different platforms, ensuring optimal engagement.
- **dedicated web presence**
Establish a dedicated website or webpage for your hackathon, serving as the central information hub for all stakeholders.

- **inviting email templates**
Craft an inviting email template for invitations, striking the perfect balance between professionalism and enthusiasm.
- **physical and virtual elements**
Prepare roll-ups for physical events and virtual backgrounds for online or hybrid formats, enhancing the overall aesthetic and professionalism.
- **presentation templates**
Offer well-designed digital presentation templates (like PowerPoint) to maintain consistency in visual communication.
- **informative brochures**
Provide participants with brochures or participant guides, detailing everything they need to know about the hackathon.
- **engaging videos**
Create a teaser video or a series of short interviews and videos to generate excitement and offer a glimpse into the hackathon experience.

Alongside visual elements, the power of well-crafted written content can't be overstated. From press releases to social media posts, the right words can significantly amplify your message and effectiveness.

If your team lacks the necessary media skills, consider enlisting the help of professionals or communication agencies. A modest investment in expert assistance can greatly enhance the quality and impact of your hackathon's communication efforts.

Streamlining participant applications: crafting an efficient and inclusive process

When it comes to hackathons, the participant application process is a crucial step. It's not just about gathering information; it's about building the foundation of your event.

Hackathon participants typically have the option to apply either individually or as pre-formed teams.

Here's how to make your application process smooth, inclusive and effective:

- **choose the right platform**
Select a platform that's user-friendly and comprehensive. While Google and Microsoft Forms are great for simplicity, platforms like Jotform and Typeform offer advanced features that might better suit your needs.
- **state clear entry requirements**

In your application form, reiterate the entry criteria. This clarity is crucial, especially if the application link circulates independently on social media. Make it unmistakably clear who is eligible to apply and who isn't.

- **offer flexible team formation options**

Offer applicants the flexibility to apply either as individuals or as pre-formed teams. For complete teams, ensure that they understand they won't need additional members. For those still forming, clarify that they might be paired with others.

- **facilitate matchmaking**

If your hackathon welcomes individual applicants or teams in the making, the matchmaking phase becomes essential. In this phase, participants meet (either virtually or physically), exchange ideas, and organically form their final teams. This process isn't just about team formation; it's a prelude to the collaboration and innovation that lies ahead.

- **establish a sufficient application window**

Ensure that your application period is adequately long. Usually, keeping applications open for a minimum of three to four weeks is advisable. Plan to have a buffer period post-closure for late applications, or even consider extending the deadline if needed.

- **proactive promotion**

Kick off the application phase with a well-planned promotional campaign. Keep an eye on the response rate; if applications are trickling in slowly, it might be time to amplify your outreach. Leverage partners and ambassadors to spread the word far and wide.

By focusing on these key aspects, you can ensure that your hackathon attracts a diverse and talented pool of participants, laying a strong foundation for a successful event.

Optimizing participant selection for a successful hackathon

Selecting participants from a pool of applicants is a pivotal phase in orchestrating a successful hackathon.

Prepare to offer constructive feedback to both successful applicants and those not selected for participation.

Here's a streamlined approach to ensure fairness, transparency and efficiency in this process:

- **transparent criteria**

Make sure the selection criteria, reflecting both the hackathon's objectives and entry requirements, are clear and publicly disclosed. This transparency fosters trust and clarity among applicants.

- **communication of dates**

Ideally, you should have already communicated the dates when applicants will be informed about their selection status during the application phase. This practice sets clear expectations and helps in planning.

- **feedback for applicants**

Be prepared to offer constructive feedback, not just to those who are selected, but also to those who don't make the cut. This feedback can be a valuable learning opportunity for all applicants.

- **scoring and wait-listing**

Implement a systematic scoring system for all candidates. A well-maintained table of scores aids in this process. Additionally, formulating a waiting list ensures that you have backups ready, should any selected participants drop out.

- **effective communication**

Draft welcoming emails for selected participants, as well as courteous notifications for those on the waiting list and those not selected. Prompt communication minimizes uncertainty and keeps all applicants informed.

- **confirmation of participation**

After the initial acceptance communication, it's crucial to obtain a written commitment from the participants. Follow up persistently if needed; this ensures that you're not faced with unexpected dropouts on the day of the event.

- **focus on motivation**

When in doubt, give priority to the most motivated applicants. Look for signs of enthusiasm, open-mindedness, and a willingness to engage in a challenging, collaborative environment. Remember, the participants are not just attendees, but the driving force of your hackathon.

By meticulously following these steps, you can curate a group of participants who are not only skilled, but also genuinely invested in the hackathon's success, setting the stage for a dynamic and productive event.

Elevating the hackathon experience: masterfully promoting the closing event

As the hackathon nears its grand finale, shift your focus to the crescendo – the closing event. This momentous occasion is more than a conclusion; it's a celebration of innovation, collaboration and community spirit.

The closing event may serve as a platform to showcase the event's achievements, drawing attention and support for future initiatives through potential funding, interest and sponsorships.

Here's how to make it memorable and impactful:

- **publicize the agenda's highlights**
Once the application phase is wrapped up, it's time to spotlight the public-friendly segments of your hackathon. Think of it as unveiling the curtain on the main act, where the collective efforts of participants reach their zenith.
- **invite the community**
Extend invitations to hackathon participants and experts and the local community as well. This inclusivity fosters a sense of belonging and showcases the hackathon's reach beyond just the tech sphere.
- **craft a compelling RSVP invitation**
Design an RSVP invitation that captures the essence of your hackathon. A well-crafted invite encourages confirmations, helping you manage logistical aspects like space and catering with precision.
- **create a networking haven**
Ensure that the venue is conducive to networking. Arrange for a section dedicated to mingling, where attendees can exchange ideas, connect over shared interests, and potentially spark future collaborations.
- **recognize unselected participants**
In a gesture of community building, invite those who didn't make it through the selection process. This inclusive approach reinforces the message that every interest in your hackathon is valued.
- **showcase successes and potential**
Use the closing event as a platform to highlight the successes of the hackathon. It's a chance to demonstrate the tangible outcomes of the event, drawing interest from potential funders and sponsors for future endeavours.

- **foster a sense of continuity**

Let this closing event be more than just an end; make it a bridge to future initiatives. Through speeches, displays and interactions, illustrate how this hackathon is a stepping stone to further innovation and community engagement.

By meticulously orchestrating the closing event, you're not just bringing a successful conclusion to the hackathon; you're sowing the seeds for future initiatives and reinforcing the lasting impact of your event.

Navigating the legal maze: intellectual property and legal considerations for your hackathon

When diving into the world of hackathons, it's crucial to tread the legal waters with care and expertise. Intellectual property (IP) rights and legal intricacies form the backbone of a well-structured hackathon. Here's a guide to ensuring your event is legally sound and respectful of all involved parties:

- **consult with legal experts early**

Involve legal professionals right from the hackathon's design phase. Their insights will be invaluable in navigating the complex landscape of IP rights and ensuring compliance with relevant laws.

- **focus on privacy and confidentiality**

Address privacy concerns head on. This includes managing personal data, the right to use images captured during the event, and safeguarding any confidential information shared.

- **clarify rights post-hackathon**

Establish clear guidelines on what rights organizers, participants and partners hold post-event. This might range from full ownership to licensing agreements or other types of arrangements. Clarity here prevents future disputes and misunderstandings.

- **protect sensitive information**

If sensitive or proprietary information is part of the hackathon, ensure that its confidentiality is maintained. This might require special agreements or non-disclosure forms to be signed by participants.

- **draft transparent agreements**

Whether it's with sponsors, venue providers, or partners, have written agreements that clearly outline each party's role, responsibilities and rights. Transparency here builds trust and avoids legal complications down the line.

- **establish fair judging criteria**

Ensure that your judging and selection criteria are merit based and

transparent. This not only fosters a sense of fairness, but also upholds the integrity of your hackathon.

- **consider health and dietary needs**

Don't overlook practical aspects like food allergies and intolerances. Ensuring that these needs are catered to reflects your event's inclusivity and attention to detail.

By meticulously planning for these legal and IP considerations, your hackathon not only stands on solid legal ground, but also demonstrates a commitment to professionalism and ethical standards. This approach safeguards your event, and also builds a foundation of trust and respect with all stakeholders involved.

Maximizing hackathon potential: the power of a pre-hackathon session

Embarking on a hackathon journey? Consider the game-changing potential of a pre-hackathon session. This preliminary gathering, whether online or in person, can significantly elevate the success and satisfaction levels of your event.

Here's a breakdown of how a pre-hackathon session can supercharge your hackathon:

- **introduce the event**

Kick off with an engaging overview of what's in store. This sets the stage and energizes participants about the upcoming hackathon.

- **establish the rules of the game**

Clarify the timeline, expected outcomes, tools and resources available, pitch formats, evaluation criteria, and prizes. Transparency here builds a clear roadmap for participants.

- **meet the organizing team**

Introduce your mentors, jury members and facilitators. Familiarizing participants with these key figures fosters a sense of community and support.

- **unpack the challenge**

Dive deep into the hackathon's core challenge, offering context and insight. This helps participants align their thinking and approach to the event's goals.

- **facilitate matchmaking**

For individual applicants or incomplete teams, this session is a golden opportunity for matchmaking. Encourage interaction, idea sharing and team formation in a structured yet relaxed environment.

- **hold interactive Q&A sessions**

Address any burning questions participants may have. This segment is crucial for clearing up uncertainties and aligning expectations.

Such a session is invaluable, especially for hackathon newcomers. It aligns expectations, fosters early team bonding, and sets a clear path forward. Addressing common queries like the expected scope of development, the desired depth of solutions, and the appropriateness of various approaches to the challenge can pre-empt confusion and streamline the hackathon process.

By incorporating a pre-hackathon session, you're preparing participants and empowering them to fully engage with the hackathon experience, ensuring a more cohesive, productive and enjoyable event for everyone involved.

Optimizing your hackathon venue: creating the perfect environment

Setting up the ideal space for your hackathon is crucial, whether it's a physical, digital, or hybrid event. Each format demands specific arrangements to ensure that participants are comfortable, inspired and ready to innovate. Let's dive into how you can transform each space into an innovation hub.

For physical hackathons:

- **dedicated rooms**
Allocate rooms for different activities, such as brainstorming, coding, resting and presentations.
- **teamwork tables**
Arrange tables where teams can huddle, discuss and create together.
- **essential materials**
Provide all necessary materials – from pens and paper to specialized software.
- **catering arrangements**
Keep your participants fuelled with a variety of food and beverages.
- **tangible rewards**
Display the prizes or awards to keep the competitive spirit high.
- **branded merchandise**
Offer hackathon-themed T-shirts and gadgets to boost morale.
- **creative tools**
Supply ideation materials like canvases or whiteboards for brainstorming.
- **main stage set-up**
Prepare a central stage for presentations and announcements.
- **tech essentials**

Ensure a robust internet connection, audio systems, projectors and computers.

For digital hackathons:

- **reliable internet**
A strong internet connection is non-negotiable for a smooth digital experience.
- **selecting a platform**
Choose the right digital platform (like Discord, Slack, Teams) for seamless communication.
- **virtual rooms and channels**
Create digital spaces for teams to collaborate and discuss.
- **document sharing tools**
Integrate tools like Google Drive, Teams, or Dropbox for easy access and sharing of documents.
- **collaborative platform**
Utilize interactive tools like Miro, Mural, or Jamboard for brainstorming and planning.
- **custom virtual backgrounds**
Offer themed virtual backgrounds to keep the event's spirit alive online.
- **prepared slides**
Have slides ready for presentations, pitches and workshops.

For hybrid hackathons: combining the best of both worlds

For hybrid events, blend elements from both physical and digital setups. Ensure seamless integration of virtual tools with physical spaces, so remote participants feel as engaged as those onsite.

By tailoring your hackathon environment to the format of your event, you create an atmosphere that encourages creativity, collaboration and innovation, setting the stage for a successful and memorable hackathon.

DURING THE HACKATHON

**Welcome aboard**

launch the hackathon!

**Facilitate networking**

build connections

**Energize the kick-off**

set the stage for success

**Inject fun**

balance work with play

**Unveil the agenda**

the road map of the event

**Promote physical well-being**

encourage movement

**Meet the crew**

introduce the team and guests

**Smooth operations**

ensure a seamless experience

**Clarify the deliverables**

set expectations

**Conflict resolution**

maintain harmony

**Tool time**

a sneak peek into hackathon resources

**Reiterate expectations for alignment and clarity****Deep dive**

expert-led learn sessions

**Guide towards effective deliverables****Refine the challenge**

identify subchallenges for targeted impact

**Monitor ongoing progress****Vital breaks**

sustain energy and focus

**Acknowledge contributions****Emotional check-ins**

support participant well-being

**Adaptability in event management****Balance flexibility with structure**

Now, let's delve into the hackathon's core: the actual hacking session!

This is where the unique intensity of hackathons comes to life, setting them apart from other events. The duration and format of this segment hinge on the decisions made in the planning stage. It's a high-energy, high-focus period where innovative ideas are rapidly transformed into tangible solutions.

For your organizing team, this phase is a marathon of multitasking with limited downtime. It's crucial to ensure that the team is well prepared for this demanding stretch, both mentally and physically. A best practice is to grant your team a brief respite in the days leading up to the hackathon. This proactive step can prevent burnout and ensure that everyone is fresh, alert and ready to tackle the challenges head on. Remember, a well-rested team is your hackathon's backbone, which is instrumental in steering the event towards success.

3, 2, 1 hack!

Welcome aboard: launching the hackathon!

The countdown is over and the hackathon adventure begins! Whether it's a bustling onsite event or a dynamic virtual gathering, the welcome phase sets the tone for the entire experience.

For an onsite event, dedicate a full hour to warmly greet participants. This is more than just a check-in; it's about sparking excitement for the journey ahead. At the registration desk, participants receive personalized badges, marking their entry into the hackathon universe. Elevate this experience with a curated welcome kit, brimming with essentials: a hackathon agenda, pens, sponsor goodies, a custom T-shirt, and a quirky gadget. It's not just about the items; it's about making every participant feel valued and geared up for the challenge.

In the digital realm, the welcome takes a tech-savvy turn. Participants log into the designated platform, ensuring that their profiles are correctly set up – names, team affiliations, and all. But why stop at logistics? Surprise them with a virtual welcome pack: a detailed schedule, handy reminders and custom virtual backgrounds for those plenary sessions. The idea is to create a cohesive, engaging online environment that mirrors the energy of a physical gathering. Let's make the first impression count!

Energize the kick-off: setting the stage for success

Now that everyone's gathered, it's time to dive into the heart of the hackathon. Begin by revisiting the hackathon's purpose, objectives and the challenges ahead. This isn't just a reminder; it's an opportunity to reignite the passion and focus of every participant. Use inspiring videos that encapsulate the hackathon's spirit, creating an atmosphere buzzing with excitement and anticipation.

Unveil the agenda: the road map of the event

Clarity is key in hackathons. Following the introduction, present a detailed overview of the event's agenda. Highlight the milestones: mentoring sessions, plenary gatherings, lectures and crucial deadlines for deliverables. This road map is essential for everyone to effectively navigate the hackathon's journey.

Meet the crew: introducing the team and guests

It's crucial that participants know who's who. Introduce the organizing team and outline their roles – facilitators, logistic coordinators, mentors and experts. A clear understanding of each member's role fosters a seamless and well-coordinated hackathon experience.

Clarify the deliverables: setting expectations

Reinforce the expected deliverables, even if previously communicated. Use this time to address any lingering questions from the pre-hackathon session or recent inquiries. Ensuring that everyone is aligned on expectations paves the way for a productive and focused hackathon.

Tool time: a sneak peek into hackathon resources

While detailed sessions will explore the tools more in depth, provide an initial overview of the key resources. Illustrate how these tools can be leveraged for tasks like problem identification and persona development. This sneak peek sets the stage for effective use and mentor-supported exploration during the event.

Deep dive: expert-led learning sessions

After setting the overall scene, it's time for a deep dive into the theme through expert presentations. Whether it's keynote speeches, individual speeches, or a panel discussion, tailor these sessions to enrich the participants' understanding. To make these sessions truly participant centred, consider sharing the speakers' list in advance and inviting questions from teams. This proactive approach ensures that the discussions are relevant, engaging and focused on the participants' needs and curiosities.

Refine the challenge: identifying subchallenges for targeted impact

Encourage participants to delve deeper into the primary challenge and identify specific subchallenges they can address. Emphasize that while their solutions may not resolve the overarching issue, they play a crucial role in tackling key aspects. Facilitators should instil the importance of starting small, perhaps locally, and focusing on creating a minimum viable product (MVP). The goal is to jumpstart the creative process, with mentors guiding teams to develop meaningful and impactful solutions.

Vital breaks: sustaining energy and focus

Recognize the intense nature of a hackathon and the need for adequate nourishment

and rest. Provide a mix of energy-boosting drinks, healthy snacks and meals to fuel participants. Ensure that the venue has good air quality, lighting and comfortable workspaces. Remember, a well-fed and rested team is a productive and creative one.

Emotional check-ins: supporting participant well-being

Regularly check in with participants to gauge their emotional well-being. Address any frustrations, such as feeling lost, overwhelmed by time constraints, or dealing with team conflicts. These check-ins are vital to maintaining a positive and productive hackathon environment.

Facilitate networking: building connections

Create opportunities for networking to foster connections and collaboration beyond individual teams. Organize informal events like a networking evening or happy hour, inviting partners, sponsors and other stakeholders. In digital events, leverage platforms like Slack or Discord to simulate these networking moments. Consider incorporating recruitment opportunities, allowing participants to explore potential career advancements.

Inject fun: balancing work with play

Balance the hard work with moments of fun and relaxation. Incorporate interactive activities like games, quizzes and informal competitions, whether onsite or virtual. These lighter moments provide a much-needed break and keep spirits high.

Promote physical well-being: encouraging movement

Counteract the sedentary nature of hackathon work with scheduled physical activities. Include options like stretching exercises, yoga sessions, or short outdoor walks. Whether the event is onsite or virtual, encourage participants to stay active, enhancing their overall well-being and focus.

Smooth operations: ensuring a seamless experience

Facilitators play a crucial role in maintaining the smooth flow of the hackathon. Address common queries in group settings to ensure clarity and inclusivity. Keep the energy high and the atmosphere positive, ensuring that all teams feel supported and valued.

Conflict resolution: maintaining harmony

Be prepared to quickly and effectively resolve conflicts that may arise due to the event's competitive nature. Equip your team with conflict resolution skills to address issues promptly, preserving the hackathon's positive environment and preventing any negative impact on participant morale.

Reiterate expectations for alignment and clarity

Continuously reinforce the hackathon's goals and expectations. Facilitators, mentors

and all involved should consistently remind participants of the objectives and desired outcomes. This repetition ensures that everyone remains aligned and focused on the event's purpose.

Guide towards effective deliverables

Incorporate a session dedicated to understanding deliverables, perhaps titled “Mastering the pitch” led by an expert. This session should provide guidelines for creating impactful pitches, showcasing examples of expected deliverables. Emphasize the importance of time management and clear messaging. If digital presentations are involved, provide templates or samples to guide participants.

Monitor ongoing progress

Facilitators and mentors should frequently check on team progress, offering guidance and support where needed. Be prepared to reallocate mentor resources, ensuring equitable assistance across all teams and that no group falls behind.

Acknowledge contributions

Express gratitude towards mentors, speakers and partners. Their involvement, often voluntary, is vital to the hackathon's success. Show appreciation by including them in community activities, giving them breaks, and ensuring that they enjoy the experience.

Adaptability in event management

Be prepared for the unexpected and remain flexible in adjusting the hackathon's format and rules as needed. The organizing team should be ready to make seamless changes that enhance the event without causing significant disruption.

Balance flexibility with structure

While adaptability is crucial, maintain the hackathon's core structure, especially regarding time and phases. Any adjustments should align with the overall purpose, objectives and KPIs of the event. Encourage flexibility, but always within the framework of the hackathon's structured environment.

AFTER THE HACKATHON

- ☐ Team debrief and gratitude
- ☐ Special attention to winners
- ☐ Participant feedback through surveys
- ☐ Reflective team meeting
- ☐ Issue certificates
- ☐ Track the hackathon's impact
- ☐ Personalized thank-you notes
- ☐ Sustain outcomes and extend impact
- ☐ Ongoing engagement with participants

After the energy and excitement of the hackathon, it's crucial to transition into a phase of reflection and assessment. This stage is about understanding the event's impact, learning from the experience, and preparing for future initiatives.

Team debriefing and gratitude

Schedule a debriefing session soon after the hackathon concludes. An external facilitator can help guide this process, encouraging open, constructive dialogue. This session is an opportunity to celebrate successes, address shortcomings, and show appreciation for everyone's hard work.

Participant feedback through surveys

Distribute a well-crafted evaluation survey to all participants, mentors and partners. Gather feedback while the experience is still fresh in their minds. The survey should cover various aspects of the hackathon, from team dynamics to mentor support, ensuring a comprehensive understanding of the event's effectiveness.

Issuing certificates

Recognize participation with certificates, which can be particularly valuable for

students and young professionals. If relevant, offer accreditation, such as European credit transfer and accumulation system (ECTS) credits or digital badges. Highlighting these benefits during the application phase can boost participation.

Personalized thank-you notes

Send personalized thank-you notes to mentors, speakers, partners, sponsors and volunteers. These notes can accompany certificates and, where possible, include a small token of appreciation.

Ongoing engagement with participants

Follow up with all participants, offering further opportunities, support and networking connections. This outreach is vital to maintain the momentum and foster a sense of ongoing community.

Special attention to winners

Engage promptly with the winning teams, offering one-on-one meetings to discuss the next steps. Keeping the winners' enthusiasm alive after the event is essential for sustaining their project's momentum.

Reflective team meeting

After some time has passed, convene another team meeting to re-evaluate insights from the debriefing session. Documenting these discussions can provide valuable learnings for future events.

Tracking the hackathon's impact

Measuring the hackathon's impact is multifaceted. Consider factors such as participation rates, satisfaction levels, number of viable ideas generated, subsequent start-ups or patents, community impact, and media interest. This assessment helps quantify the event's success and areas for improvement.

Sustaining outcomes and extending impact

To maximize the hackathon's long-term impact, consider activities like:

- providing ongoing coaching and mentoring;
- featuring hackathon artifacts at other events for repeated exposure;
- assisting teams with grant writing;
- building and maintaining social networks for participants; and
- facilitating access to incubators, accelerators and bootcamps.

By thoughtfully engaging in these post-hackathon activities, you not only measure the event's success, but also lay the groundwork for lasting impact and future collaborations.

Conclusions and future research

CHAPTER 07



CHAPTER VII

Conclusions and future research

In this comprehensive handbook, we embarked on a journey through the vibrant and transformative universe of hackathons. From their historical roots to their modern-day manifestations, we've peeled back the layers to reveal the essence of these dynamic, high-energy events. Our exploration has covered not only the mechanics of organizing and executing hackathons, but it has also delved deep into the nuances of what happens before, during and after these creative marathons.

This guide, tailored for both practitioners and those with a burgeoning interest in hackathons, aims to be a practical resource for crafting effective and impactful events. We've highlighted the multifaceted nature of hackathons, showcasing their ability to generate innovative solutions and foster collaborative efforts. But beyond their immediate allure, we've also addressed the critical critiques and challenges associated with hackathons, lending a balanced perspective to their role in the modern world. One of the pivotal themes we've emphasized is the potential long-term impact of hackathons. These events are more than just ephemeral gatherings; they are breeding grounds for sustained innovation and change. The true value of hackathons often unfolds in the aftermath, as ideas and projects that were developed during these intense sessions evolve and mature, impacting individuals, organizations and entire ecosystems.

As we turn our gaze to the future, it's evident that more research is needed, particularly in understanding the lasting effects of hackathons. These events hold a reservoir of untapped potential, especially in sectors like agriculture and food systems, where innovation is not just desirable but essential. By popularizing hackathons in these areas, we can harness diverse expertise to tackle some of the most pressing challenges of our time.

The societal and economic implications of hackathons also warrant further exploration. Beyond being hubs for innovation and collaboration, hackathons act as catalysts for entrepreneurship, technology development, and economic growth. They instil a culture of continuous learning and problem-solving, with far-reaching impacts that extend well beyond the event itself.

In closing, this handbook is more than just a guide; it's an invitation to join a movement that champions innovation, embraces collaboration, and celebrates the human spirit's boundless creativity. Whether you're an organizer, participant, or simply a curious observer, we hope this handbook inspires you to dive into the world of hackathons and contribute to the rich tapestry of innovation they continue to weave.

Dear reader,

Thank you for joining us on this journey. May your hackathon adventures be filled with discovery, collaboration and long-lasting transformative experiences. Here's to the future of impactful innovation – one hackathon at a time!



The ultimate guide to agrifood hackathons

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