CEIH

Hackathon *Tool Kit*

A self paced guide to designing, delivering and implementing a hackathon within your workplace.





Hackathon Tool Kit

Overview

A hackathon is a time-bound challenge that addresses a specific question through innovative thinking. The hackathon format is a tool to foster critical conversations through the use of innovation methodologies, encouraging cross team collaboration and building capability in the initial ideation phase of the innovation continuum (ceih.sa.gov.au/innovation).

How to navigate the tool kit

The Hackathon Tool Kit aims to support the development and deployment of your hackathon. The toolkit outlines:

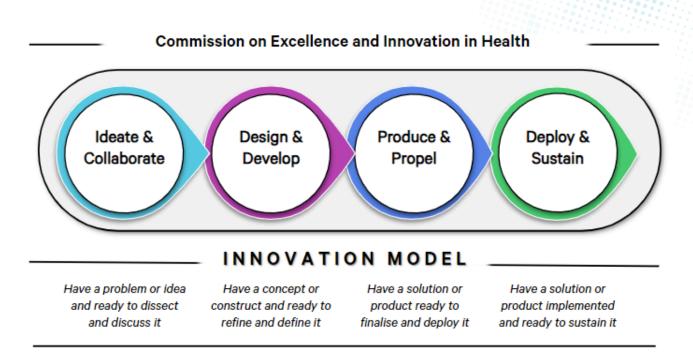
- how to set up and manage your hackathon for success
- example agenda and scoring matrix
- example resources for each of the three phases of the hackathon
- additional key considerations

The hackathon process outlined in this tool kit has been designed in accordance with the <u>CEIH Innovation Model</u> methodology, using the first stage: **ideate and collaborate** as the foundations.

Hackathon Tool Kit

The CEIH Innovation Model

The Model offers an evidence based, staged approach to innovation, taking an idea to sustainable solution.





What's Involved?

Getting people together to create, assess, and share solutions to problems.

Why is it important?

Being able to evolve an idea with others into a tangible solution, provides the foundation on which the innovation will be built.

The hackathon methodology in this tool kit has been modelled from the first stage of CEIH Innovation Model, Ideate and Collaborate, which aims to target the early stage innovation process.



Hackathon Roadmap

Your Path to Success

Define the Objectives

01

- What is the purpose of your hackathon? What does the post event implementation look like?
- What do you want to achieve?
- What is your budget and scale?

02 Finalise the question

- What problem or opportunity do you want to innovate?
- Be targeted and focused

Plan the Hackathon

03

- What is the format? What is the duration? i.e. day, week
- Who needs to be involved?
- What is the structure of the teams?

04 Provide Resources

- What information do participants need?
- What resources are required to support the process?

Promote the Hackathon 05

- Who are the key stakeholders
- How will the target audience be engaged?
- What are your key messages?

06 Deliver the Hackathon

- Are all resources available to key stakeholders?
- Are participants ready to engage? Are the processes easy to follow?

Event Day Agenda

Example Schedule

The below Hackathon agenda outlines an example 1 day format.

Introduction and Opening Remarks Phase 1: Ideation Understand the Need/Opportunity Select a Need Frame the Problem Generate Ideas with Others Break Phase 2: Synthesising the Idea Conceptualise Solution State the Value Proposition Validate the Credibility of the Solution Break **Phase 3: Pitching** Create and deliver the pitch **Break Judging Outcome and Closing Remarks**

PHASE 1: Ideation



Understand the Need/Opportunity

What's involved?

Examining a situation and determining where there is an opportunity to add value.

Why is it important?

Being able to see where solutions are required, enables a starting point for innovation.

Considerations
Why is this a need?
Who's need/opportunity

is it? How will you determine if it is a need?

Prompt: Each group will examine the hackathon question and identify problem, needs or opportunities that could be innovated and share with the group. Limit of two per person.

2

Select a Need

What's involved?

Selecting a singular need where there is a potential to change for greater outcomes.

Why is it important?

Being able to clearly articulate a need will provide a strong foundation for effective ideation. Considerations
Why did you select this
need?
What impact will
addressing this need
have on the target user?

Prompt: Group to discuss issues, opportunities and problems and select one particular need to be addressed.

PHASE 1: Ideation



Frame the Problem

What's involved?

Analysing the influential factors and issues that are associated with the problem.

Why is it important?

Being able to articulate the specific issue being addressed enables clarity amongst the creativity.

Considerations
What is the specific
problem?
What is causing/creating it?
Why is the problem
critical to address?

Prompt: Group to explore factors that relate to the problem/need/opportunity and use the provided template

[Activity 1: Problem Statement]

4

Generate Ideas with Others

What's involved?

Eliciting and combining creative thoughts from a diverse group on approaching the problem.

Why is it important?

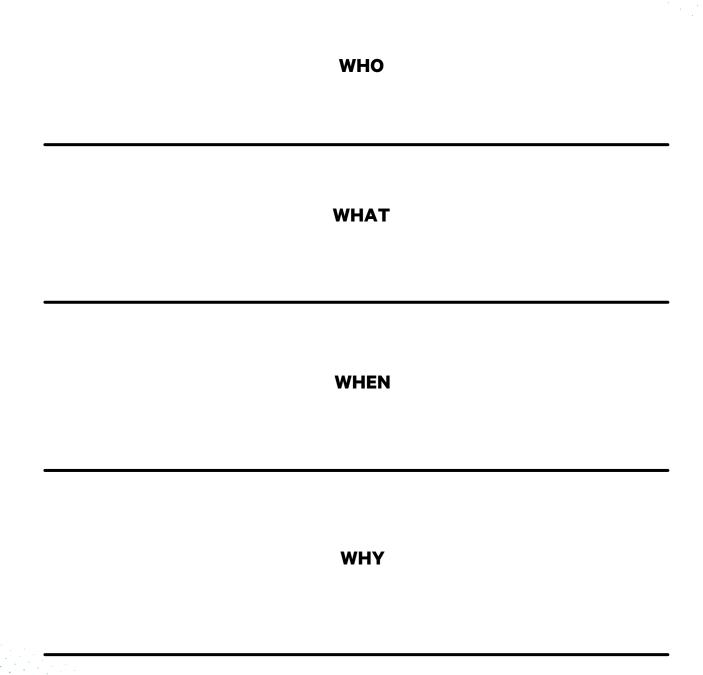
Being able to extract and integrate suggestions from a group enables collective insight and wisdom.

Considerations
What are the different
perspectives and
factors to consider?
How will you integrate the
thoughts from others?

Prompt: Each individual to share an idea that will address the problem and its causes with the group.

Activity 1

Frame the problem Problem Statement Tool





PHASE 2: Synthesising the Idea



Conceptualise Solution

What's involved?

Developing a clear statement that articulates the fundamental components of the solution.

Why is it important?

Being able to describe the solution enables an understanding of its relevance and applicability.

Considerations What are the main elements of the solution? How will the solution function and be delivered?

Prompt: Group to sift then select a solution they will 'take forward' throughout the hackathon. [Activity 2: Conceptualise Solution]



State the Value Proposition

What's involved?

Generating a statement that conveys the benefits that will be realised as a result of the solution.

Why is it important?

Being able to describe how the solution adds value enables an understanding of its impact. Considerations

What is the specific benefit your solution is offering? How does your solution deliver this benefit? Who does the solution provide value to?

Validate the Credibility of the Solution

What's involved?

Assessing the suitability of the solution through perspectives of evidence and experts.

Why is it important?

Being able to demonstrate the solution is verified enables confidence in it achieving its value.

Considerations

Does the solution provide more value than what is currently being done? How will this be validated? What

makes the solution reasonable to peers and industry standards? How will you prove this?

Prompt: Group to discuss and select a solution they will 'take forward' throughout the hackathon. [Activity 2: Conceptualise Solution]



Activity 2

Conceptualise Solution

What is the solution?

What are the key elements?

How will it function and be delivered?



Activity 3 Value Proposition



	How do	es your so	olution add	lress the n	eed?	
at are the	key benefi	ts of your	solution?	And who re	ealises these	bene



PHASE 3: Pitching

What's involved?

Creating and delivering a narrative that describes and demonstrates the value of the solution.

Why is it important?

Being able to effectively articulate the solution enables attraction of interest and investment.

Considerations

What are the most appealing elements of the solution?
Have you included the most desirable elements in the pitch content?

Prompt: Group to synthesise the final solution, and create a visual presentation to accompany the pitch [example pitch formula below]. The pitch duration is usually short, between 5-10 minutes.

EXAMPLE FORMULA:



SET THE SCENE

Create a story / narrative / hook / tag line



PROBLEM FRAMING

· Start with the "Why" - why is the problem relevant



SOLUTION

- What is the opportunity identified and how does your solution address the problem?
- Why is the solution relevant? what benefit will it provide?



MARKET ANALYSIS

- Are there any solutions currently addressing this problem?
- What is the need for your solution within the current market?



IMPLEMENTATION GOALS

- What does the timeline for implementation look like?
- What are the necessary milestones to achieve uptake?
- What does success look like?



NEXT STEPS

- What needs to occur to progress implementation?
- What is your call to action?



ADDITIONAL RESOURCES

JUDGING MATRIX EXAMPLE

The below judging template is designed to be used as a guide to scoring, providing a framework that can be amended to suit the individual objectives of each hackathon.

SECTION A. Opportunity Identification and Framing			Score		Comments	
Has the team understood the opportunities surrounding the question? Have they done any additional research surrounding the topic? Have they explained the opportunity clearly? Have they understood the need for change?	1	2	3	4	5	
SECTION B. Critical and Creative Thinking			Score		Comments	
Has the team thought critically and creatively about the proposed concept? Is the concept clear, tangible, and achievable? Is the concept compelling?	1	2	3	4	5	
SECTION C. Implementation		Score				Comments
Has the team thought logistically about the potential applications and implementation pathway for the concept? Has the team described what implementation success looks like? Has the viability of the concept been effectively explained?	1	2	3	4	5	
SECTION D. Presentation		Score				Comments
Has the team clearly communicated the proposed concept? Is the presentation engaging? Did the presentation stay within the time limits.	1	2	3	4	5	
SECTION E. Teamwork		Score				Comments
Has the team demonstrated abilities in ideation, collaboration, problem solving and creative thinking?	1	2	3	4	5	
	Total Score					
	/25					

KEY CONSIDERATIONS

ROLES (Step 3 in Roadmap)

It is important that all roles and responsibilities outlined below are in alignment with the hackathon roadmap.

Participants

 Key hackathon contributors who have been selected or nominated to be involved

Mentors

 Additional key members that are not participants of the hackathon to provide guidance and mentorship to teams throughout the process

Team Leaders

• Selected member from each group to ensure the team remains focused and on track throughout the hackathon agenda

Guest Speakers

• Targeted and engaging guest speakers that compliment the agenda for additional learning opportunities i.e. subject matter expert, pitching coach etc

Judges

• To be comprised of decision makers and subject matter experts

RESPONSIBILITIES (Step 2, 3, 4, 5, and 6 in Roadmap)

- Ensure participants have information packs, inclusive of the agenda, tools, and resources one week prior to the hackathon.
- Recommended to release the question and teams the morning before the hackathon to ensure teams can form communication groups (such as teams channels) and go through the information pack and question together.
- Once the question is released, encourage participants to do high level research in preparation for the hackathon to orient around the topic if unfamiliar.

KEY CONSIDERATIONS

FORMAT (Step 3 in Roadmap)

- Ensure length of hackathon takes into consideration participant capacity and current demands. Recommended format is a 1-2 day intensive for consistency and reduced team disruption.
- Consider the most appropriate scheduling of the hackathon i.e. over the weekend, after hours or during the working week. Recommended scheduling is during work hours.

POST HACKATHON (Step 1 in Roadmap)

- During the planning phases, have a clear plan for post hackathon action.
 What measures will be put in place to take forward the ideas generated, how will the viability of these be determined? What resources are required?
- Communication is key, ensure there is a plan to update participants post hackathon with how action is being taken to progress the efforts undertaken

This resource was produced by the CEIH to provide an introduction to hackathons. It serves as a guide to users to successfully design and deliver them.

It is intended for use by any team or agency looking to implement creative solutions to challenging problems.

