



ENGINEERS 4 EUROPE



# Roadmap

## ENTREPRENEURSHIP 4 ENGINEERS FACILITATOR GUIDE

Sub-Module 3.4

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# Introduction

Welcome to the activities of Module 3.4 – Roadmap.

As an aspiring entrepreneur, you have reached the stage where you know your target audience, the product or service to develop, and the viability of your business opportunity.

This workbook will guide you in mapping out what actions to take, how to execute them, and when to achieve your goals and objectives.



# Module Overview



## Pre-requisites

- Opportunity identification
- Product-Market fit

## Recommended materials

|                |                                                                                                                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Book</b>    | <ul style="list-style-type: none"><li>• T-plan: The Fast Start to Technology Roadmapping. Planning Your Route to Success - Robert Phaal; Clare Farrukh; David Probert - Published by University of Cambridge, Institute for Manufacturing, 2001</li></ul>               |
| <b>Paper</b>   | <ul style="list-style-type: none"><li>• Phaal, R., Farrukh, C. J. P., &amp; Probert, D. R. (2004). Technology roadmapping—a planning framework for evolution and revolution. <i>Technological Forecasting and Social Change</i></li></ul>                               |
| <b>Video</b>   | <ul style="list-style-type: none"><li>• <a href="https://www.youtube.com/watch?v=aBJo0yEAadQ">https://www.youtube.com/watch?v=aBJo0yEAadQ</a></li><li>• <a href="https://www.youtube.com/watch?v=khb7tXe25To">https://www.youtube.com/watch?v=khb7tXe25To</a></li></ul> |
| <b>Website</b> | <ul style="list-style-type: none"><li>• <a href="https://www.cambridgeroadmapping.net">https://www.cambridgeroadmapping.net</a></li></ul>                                                                                                                               |

# Activity Instructions



## Before the activity

- Check you fulfil the pre-requisites.
- Watch the sub-module videos.
- Verify you have the information for executing the activity.

## During the activity

- Read the example provided.
- Make sure to take the comments and suggestions into account.
- Follow the sequence in a first pass.
- Iterate to make sure there is a logical sequence of activities in the roadmap.

## After the activity

- Do the self-assessment.
- Review the materials and make sure you were thorough.
- Identify improvement items or needs for additional information.
- Iterate until the results are satisfactory.
- Review and update regularly.



## Sub-Module 3.4 – Roadmap

# ACTIVITY EXAMPLE





# Example – Key Milestones

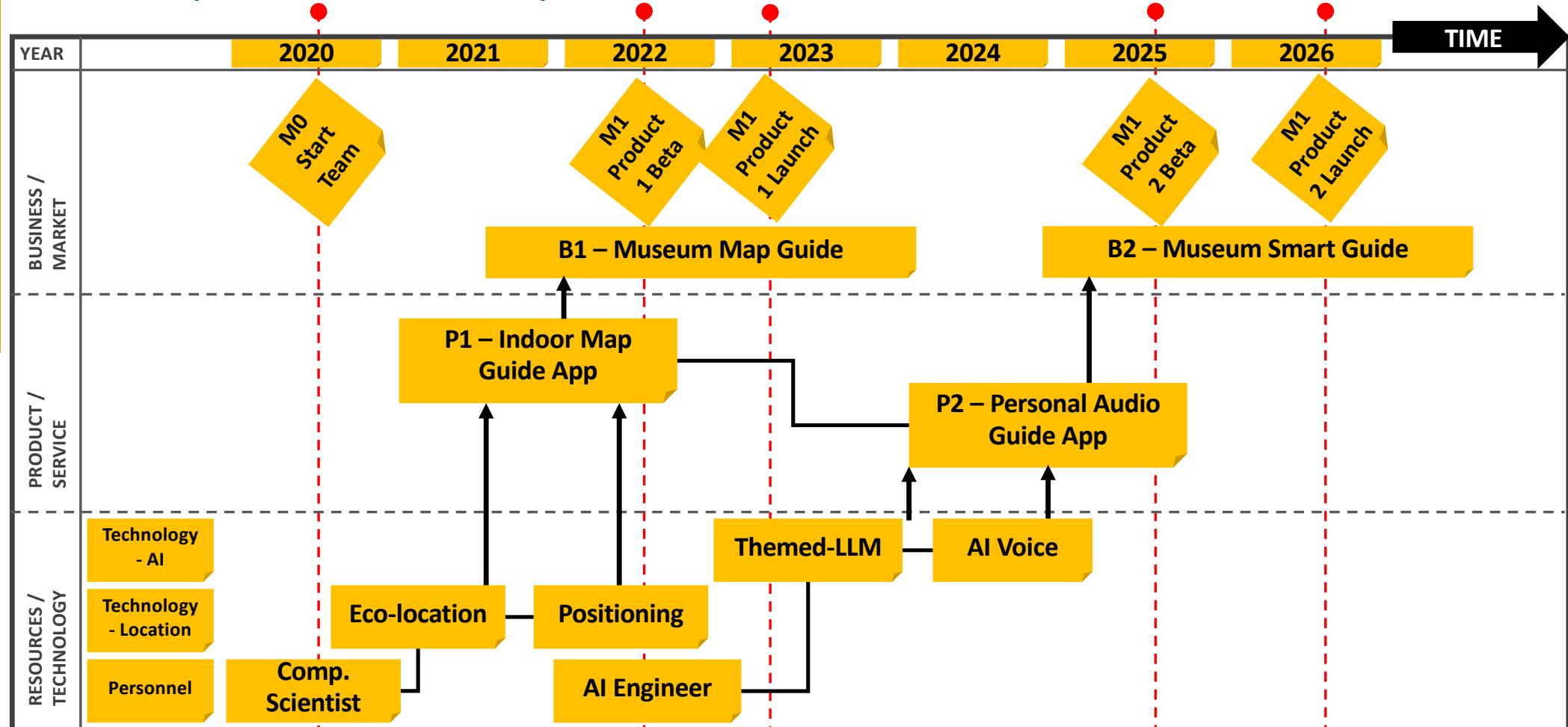
| Milestone          | Description                                  | Deadline                       | Business/Market                 | Risk(s)                                            |
|--------------------|----------------------------------------------|--------------------------------|---------------------------------|----------------------------------------------------|
| Start Team         | Get the key personnel to initiate activities | Mid-2020                       | Museum Visit Digital Map Guide  | Identify good computer scientist                   |
| Product 1 - Pilot  | Start beta testing with key partner museums  | Mid-2022                       | Museum Visit Digital Map Guide  | Establish partnership with relevant museum         |
| Product 1 - Launch | Start sales of app to museums.               | 1 <sup>st</sup> Trimester 2023 | Museum Visit Digital Map Guide  | Tech scalability                                   |
| Product 2 - Pilot  | Start beta testing with key partner museums  | Mid-2025                       | Museum Personalized Audio Guide | Performance of context-relevant IA-driven comments |
| Product 2 - Launch | Start sales of app to museums.               | Mid-2026                       | Museum Personalized Audio Guide | Tech infrastructure SLA capabilities               |



# Example – Activities & Tasks

| Activity        | Type       | Description                                    | Task(s)                                                    | Start                          | End        | Resource(s)        | Risk(s)                                       |
|-----------------|------------|------------------------------------------------|------------------------------------------------------------|--------------------------------|------------|--------------------|-----------------------------------------------|
| Comp. Scientist | Personnel  | Hire a comp. scientist for location algorithm. | 1. Write profile<br>2. Publish opportunity<br>3. Interview | Start of 2020                  | Mid-2020   |                    | Quality of hire                               |
| Eco-location    | Technology | Develop sound-based location                   |                                                            | Mid-2020                       | Mid-2021   | IP Alpha           | IP Negotiations                               |
| Positioning     | Technology | Develop indoor mapping                         |                                                            | Jan-2021                       | Mid-2021   | Software Libraries |                                               |
| Product 1       | Product    | Product development and validation             | 1. Design UX<br>2. Design UI<br>3. Test users              | Jan-2021                       | Mid-2022   | Test Users         |                                               |
| AI Engineer     | Personnel  | Hire a engineer for AI development             | 1. Write profile<br>2. Publish opportunity<br>3. Interview | Start of 2022                  | Mid-2022   |                    | Quality of hire                               |
| Themed-LLM      | Technology | Training of LLM for cultural knowledge         |                                                            | Jan-2023                       | Mid -2024  |                    | Conversational quality personalized discourse |
| AI Voice        | Technology | Conversational Voice based LLM app             |                                                            | 1 <sup>st</sup> Trimester 2024 | Early-2025 |                    | Conversational quality voice                  |
| Product 2       | Product    | Product development and validation             | 1. Design UX<br>2. Design UI<br>3. Test users              | Jan-2021                       | Mid-2022   | Test Users         |                                               |

# Example – Roadmap





## Sub-Module 3.4 – Roadmap

# ACTIVITY TEMPLATES



# Template – Key Milestones

| Milestone | Description | Deadline | Business/Market | Risk(s) |
|-----------|-------------|----------|-----------------|---------|
|           |             |          |                 |         |
|           |             |          |                 |         |
|           |             |          |                 |         |
|           |             |          |                 |         |
|           |             |          |                 |         |
|           |             |          |                 |         |



# Template – Activities & Tasks

# Template – Roadmap





## Sub-Module 3.4 – Roadmap

# ACTIVITY SELF-ASSESSMENT



# Self-Assessment

## Scoring Guide:

1 – Strongly disagree; 4 – Neutral; 7 – Strongly agree



| Questions                                                                                                                                           | Scoring |   |   |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|---|---|---|---|---|
|                                                                                                                                                     | 1       | 2 | 3 | 4 | 5 | 6 | 7 |
| Read carefully the questions. Your answers are your own guidance for future development and improvement.                                            |         |   |   |   |   |   |   |
| 1. I have completely understood the Road mapping concept and tool.                                                                                  |         |   |   |   |   |   |   |
| 2. It is clear and logical to me the need to map the activities necessary to execute the project, align them towards the objectives and deliveries. |         |   |   |   |   |   |   |
| 3. I understand the steps needed to develop my roadmap.                                                                                             |         |   |   |   |   |   |   |
| 4. I comprehend the need for iteration, review and update of the roadmap.                                                                           |         |   |   |   |   |   |   |
| 5. I know how to use the recommended tool.                                                                                                          |         |   |   |   |   |   |   |
| 6. I have used the recommended tool successfully.                                                                                                   |         |   |   |   |   |   |   |
| 7. I gain relevant insights into my development journey by using the roadmap.                                                                       |         |   |   |   |   |   |   |



## Sub-Module 3.4 – Roadmap

# FACILITATOR GUIDANCE



# Facilitator Guidance



## Before the activity

- Review all the materials of the sub-module.
- Check previous modules to understand the implications.
- Warn the participants to prepare before the session.

## During the activity

- Review the materials with the participants.
- Remind the sequence of steps to take by the participants.
- Help participants by discussing assumptions.
- Check work and give feedback.

## After the activity

- Remind participants to use the self-assessment to guide their development in this activity and its tools.
- Check with participants if they could do the first iteration without major issues.



# Example – Key Milestones (Commented)

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Indication of the functional lane to be considered in the roadmap.

Co-funded by  
the European Union

# Example – Roadmap (Commented)

