

The “Concept and Design” document will include the following, at the minimum. This document needs to be updated as your progress through this competition.

1. PROBLEM DEFINITION

- Problem Definition
- Articulation of the Problem, with a case study wherever possible
- Background Information, as relevant

2. IDEA / CONCEPT/SOLUTION TO ADDRESS THE PROBLEM

- Describe the main idea conceptualized to address the problem
- Elaborate any sub-components linked to the main idea
- Identify the engineering principles applicable for your solution. Recognise that these could overlap across various engineering disciplines
- Mention your Unique Selling Proposition – how your idea/concept/solution is really effective in solving the problem, how it is different from others available in the market, and how it is better.

3. PROJECT DESCRIPTION AND HIGH-LEVEL DESIGN

- How will you realize your idea – how to make it work in real life?
- Provide a high level “block diagram” to explain the overall working of the product
- Note that financial viability and market acceptance are a MUST for any project to be successful. These become additional objectives for your project.

4. RELEVANCE TO THE THEME

- How does your project fit into the Theme for innoWAH! 2025-26
- What are the engineering disciplines touched in your project
- Business hypothesis – Refer Appendix B

Example 1:

Industry Domain	Technology Specialization
Energy Sector	Renewable energy Data Science

Example 2:

Industry Domain	Technology Specialization
Healthcare	Assistive Technology Artificial Intelligence (AI)

(The following sections are optional for PYP, but mandatory for the next stage)

5. VALIDATION OF THE PROBLEM THROUGH DATA COLLECTION AND ANALYSIS

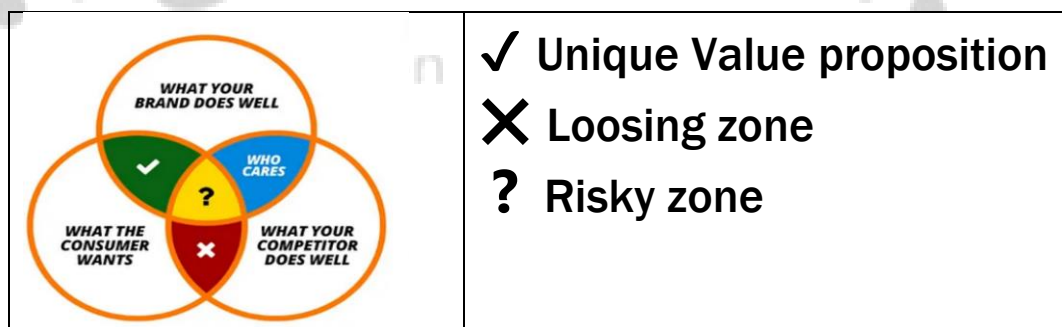
- Identification of relevant Customer Segment
- Identification of sample size, locations of surveys etc
- Data Analysis - leading to problem definition and description

6. PROJECT BENEFITS

- What are the benefits the project will provide
- Document the expected benefits
- Try to quantify the expected benefits including the Return on Investment (ROI)

7. Market Assessment & Readiness

- KYC1 – Know your customer, list down who all could be your customers with justification
- KYC2 – Know your competitors, list down who do you see as your competitor
- Illustrate your assessment with the help of the following diagram



- Explain your Technology readiness level, it should be level 5 or above for the finals

8. OTHER ASPECTS

- Conduct a broad environmental impact assessment and their mitigation
- Identify licenses or permissions that need to be obtained for use of any third-party intellectual property in your project.
- Provide an estimate of cost to create the model
- Can the model be mass produced? what would be the main challenges

9. ANY OTHER INFORMATION

- Provide any other information that you would like to provide for better understanding of your project.

10. APPENDICES

- If you wish to provide any large volume reference information to support any aspect of your project, you may provide the same here.

11. General Instructions

1. Keep the document short and crisp. Overall size of the document should not exceed 10 pages, (not including “Data Collection and analysis for validation of the problem”).
2. The details of “Data Collection and Analysis” may be provided as an Appendix.
3. Submit this document as .pdf (no embedded documents). Avoid documents needing special software.

12. Appendix A – Technology Readiness Level

TECHNOLOGY READINESS LEVEL (TRL)		
RESEARCH DEVELOPMENT DEPLOYMENT	9	ACTUAL SYSTEM PROVEN IN OPERATIONAL ENVIRONMENT
	8	SYSTEM COMPLETE AND QUALIFIED
	7	SYSTEM PROTOTYPE DEMONSTRATION IN OPERATIONAL ENVIRONMENT
	6	TECHNOLOGY DEMONSTRATED IN RELEVANT ENVIRONMENT
	5	TECHNOLOGY VALIDATED IN RELEVANT ENVIRONMENT
	4	TECHNOLOGY VALIDATED IN LAB
	3	EXPERIMENTAL PROOF OF CONCEPT
	2	TECHNOLOGY CONCEPT FORMULATED
	1	BASIC PRINCIPLES OBSERVED

Please indicate what is your technology readiness level (TRL) at each stage of the project

13. Appendix B - Business Hypothesis

Our product,

Name or Category of your Product

assists our customer,

customer type or the group

who

wants to

invest money or save energy etc

by

Explain the process or your solution / USP

unlike

Name the competition or the current state
