Design Thinking Project Workbook

Don't find customers for your product but find products for your customers

1. Team

Team Name: The Hiring Hub

Team Members:

1. [S. Harshitha, 2320030123, 9866041335]
2. [Sankalp Pandey, 2320030122, 9063447806]
3. [K. Parthsarathi, 2320030379, 9701854362]

2. Problem/Opportunity Domain

Domain of Interest: Human Resources and Recruitment Technology.

Description of the Domain: The HR and recruitment field focuses on finding and hiring the right people for jobs. It involves creating job descriptions, reviewing resumes, interviewing candidates, and making sure everything follows legal rules. A big challenge is managing the huge number of resumes that come in, which takes a lot of time and can lead to mistakes or unfair biases. Technology, especially tools that use AI and machine learning, can help make the process faster, fairer, and more efficient. Automated resume screening is one way to handle these challenges, making recruitment easier and more accurate.

Why did you choose this domain?: The choice of this domain stems from the significant potential for automation to enhance HR processes, reducing human effort and improving decision-making. With a growing number of job applications per position, recruitment is a labour-intensive process that is prone to errors and biases. By focusing on the HR tech domain, the tool not only helps solve a specific problem but also aligns with the current trend of using technology to drive workplace efficiency. Additionally, the tool addresses the need for fair and unbiased candidate selection, which is becoming increasingly important in today's diverse and inclusive workplaces. The combination of personal interest in solving real-world problems and the market potential of recruitment technology made this domain particularly appealing.

3. Problem/Opportunity Statement

Problem Statement: **The challenge is the manual process of reviewing hundreds or even thousands of resumes for each job opening. This is time-consuming, prone to human error, and may introduce biases that result in overlooking qualified candidates or reducing diversity in the hiring process. An automated solution is needed to streamline resume screening, improve accuracy, and ensure fairness in hiring decisions.**

Problem Description: **The challenge is the manual process of reviewing hundreds or even thousands of resumes for each job opening. This is time-consuming, prone to human error, and may introduce biases that result in overlooking qualified candidates or reducing diversity in the hiring process. An automated solution is needed to streamline resume screening, improve accuracy, and ensure fairness in hiring decisions.**

Context (When does the problem occur): **This problem arises when companies receive a high volume of applications for job postings, making it difficult for HR teams to manually review and fairly assess every resume. It is especially common in large organizations, industries with high turnover, or popular job openings where candidate volume is overwhelming.**

Alternatives (What does the customer do to fix the problem): **Currently, HR teams often rely on manual screening processes, using basic keyword searches to filter resumes. Some use Applicant Tracking Systems (ATS) to help organize resumes, but these systems often still require manual input or lack advanced screening features. Others may outsource recruitment to external agencies, which can be costly.**

Customers (Who has the problem most often): **The problem most often affects HR departments, recruitment teams, and hiring managers in large or growing organizations that receive a high volume of job applications. Additionally, recruitment agencies dealing with multiple clients also face this issue.**

Emotional Impact (How does the customer feel): Customers often feel stressed and overwhelmed by the manual resume screening process. The high volume of applications makes it difficult to keep up, leading to frustration and fatigue. They may also experience anxiety about missing out on the best candidates or fear that unconscious biases may affect their decisions, which can result in feelings of guilt or dissatisfaction with the hiring process.

Quantifiable Impact (What is the measurable impact): Manually screening resumes takes up a significant amount of time, with recruiters spending an average of 23 hours screening resumes for a single job opening. This leads to delayed hiring decisions, increased time-to-hire, and financial losses from unfilled positions. The cost of a bad hire due to inadequate screening is also substantial, potentially costing companies up to 30% of the employee's first-year earnings.

Alternative Shortcomings (What are the disadvantages of the alternatives):

- Manual Screening: Highly time-consuming, prone to human errors, and introduces bias, resulting in inconsistent decisions.
- Basic ATS: Limited to keyword matching, missing out on qualified candidates with different resume formats or phrasing, and often unable to handle nuanced or complex job requirements.
- Outsourcing Recruitment: Expensive, may not fully align with the company's culture or specific needs, and still susceptible to bias from human recruiters.

Any Video or Images to showcase the problem: The evidence in the form of video or image).
Provide link if available

4. Addressing SDGs

Relevant Sustainable Development Goals (SDGs): SDG 8: Decent Work and Economic 1. Growth – The problem of inefficient resume screening directly affects the quality and fairness of employment practices. By improving recruitment processes, companies can ensure fair hiring, which contributes to better job opportunities and economic growth.

2. SDG 10: Reduced Inequalities – Automating resume screening with bias detection tools can help reduce inequalities by eliminating unconscious biases in the recruitment process, leading to a more diverse and inclusive workforce.

3. SDG 5: Gender Equality – Reducing biases in hiring decisions, including gender bias, supports gender equality in the workplace by ensuring equal opportunities for all candidates, regardless of gender.

- **How does your problem/opportunity address these SDGs?: SDG 8: Decent Work and Economic Growth – By automating resume screening, the tool streamlines the hiring process, reducing the time-to-hire and ensuring that candidates are evaluated based on their skills and qualifications. This helps create more efficient hiring processes and increases access to decent work.**
- **SDG 10: Reduced Inequalities – The tool's use of Natural Language Processing (NLP) and Machine Learning (ML) helps detect and minimize biases, ensuring that candidates from diverse backgrounds have an equal chance of being shortlisted. This directly reduces inequalities in the recruitment process.**
- **SDG 5: Gender Equality – Implementing bias detection helps eliminate gender bias from resume screening, promoting equal treatment and opportunities for all genders. This supports companies in meeting diversity goals and fostering an inclusive work environment.**

By addressing these SDGs, the automated resume screening tool contributes to fairer hiring practices, promoting economic growth, reducing inequalities, and supporting gender equality in the workplace.

5. Stakeholders

Answer these below questions to understand the stakeholder related to your project

1. **Who are the key stakeholders involved in or affected by this project?**

The key stakeholders involved in this project include HR departments and recruiters, job applicants, hiring managers, company executives, technology vendors and developers, diversity and inclusion (D&I) teams, and Applicant Tracking System (ATS) providers.

2. **What roles do the stakeholders play in the success of the innovation?**

HR departments and recruiters will primarily use the tool and provide essential feedback for its optimization. Job applicants are the end users, benefiting from a fair evaluation process, while hiring managers rely on the tools output to select candidates. Company executives offer financial and strategic support for implementation, while technology vendors and developers are responsible for building and maintaining the system. D&I teams ensure the tool promotes fairness and reduces bias, and ATS providers may assist with integration.

3. **What are the main interests and concerns of each stakeholder?**

HR departments and recruiters are interested in reducing the time spent on manual resume screening and improving the accuracy of candidate selection, while they are concerned about the tool's usability and reliability. Job applicants seek a fair and quick hiring process, with concerns about whether the tool will accurately evaluate their qualifications. Hiring managers want to receive top candidates swiftly, but they are concerned about how well the tool ranks candidates against job requirements. Company executives aim to enhance recruitment efficiency and reduce costs, while being concerned about the return on investment (ROI) and overall business outcomes. Technology vendors and developers are interested in delivering a functional and scalable tool, but they may be worried about technical challenges. D&I teams are focused on minimizing biases in hiring practices, and they are concerned that the tool could unintentionally introduce new biases if not developed thoughtfully. ATS providers are interested in expanding their systems' functionality through integration, while also being concerned about compatibility and potential complexities.

4. **How much influence does each stakeholder have on the outcome of the project?**

HR and executives have high influence, developers and hiring managers medium, applicants low, D&I teams guide fairness, and ATS providers influence integration.

5. **What is the level of engagement or support expected from each stakeholder?**

   HR and developers engage highly, hiring managers and D&I teams moderately, job applicants and ATS providers minimally, with executives providing key support.

6. **Are there any conflicts of interest between stakeholders? If so, how can they be addressed?**

   Conflicts between HR, applicants, and developers can be resolved with transparency, expectation management, phased rollouts, and collaboration between D&I teams and developers.

7. **How will you communicate and collaborate with stakeholders throughout the project?**

Communication with stakeholders will be maintained through regular meetings, progress updates, and feedback loops. HR, developers, and D&I teams will have frequent touchpoints, while executives will receive periodic reports on progress and outcomes. Job applicants will be kept informed via transparent guidelines.

8. **What potential risks do stakeholders bring to the project, and how can these be mitigated?**

Potential risks include HR concerns over usability, applicant scepticism about fairness, and developer delays. These can be mitigated by clear communication, user training, managing expectations, phased rollouts, and collaboration with D&I teams to address bias issues.

6. Power Interest Matrix of Stakeholders

Power Interest Matrix: **Provide a diagrammatic representation of Power Interest Matrix**

Power/Interest	Stakeholders
High Power, High Interest	HR Departments/Recruiters, Company Executives, Technology Vendors/Developers
High Power, Low Interest	Hiring Managers, ATS Providers
Low Power, High Interest	Diversity & Inclusion (D&I) Teams, Job Applicants
Low Power, Low Interest	General IT Support Staff, External Consultants (if any)

7Empathetic Interviews

Conduct Skilled interview with at least 30 citizens/Users by asking open ended questions (What, why/How etc) and list the insights as per the format below

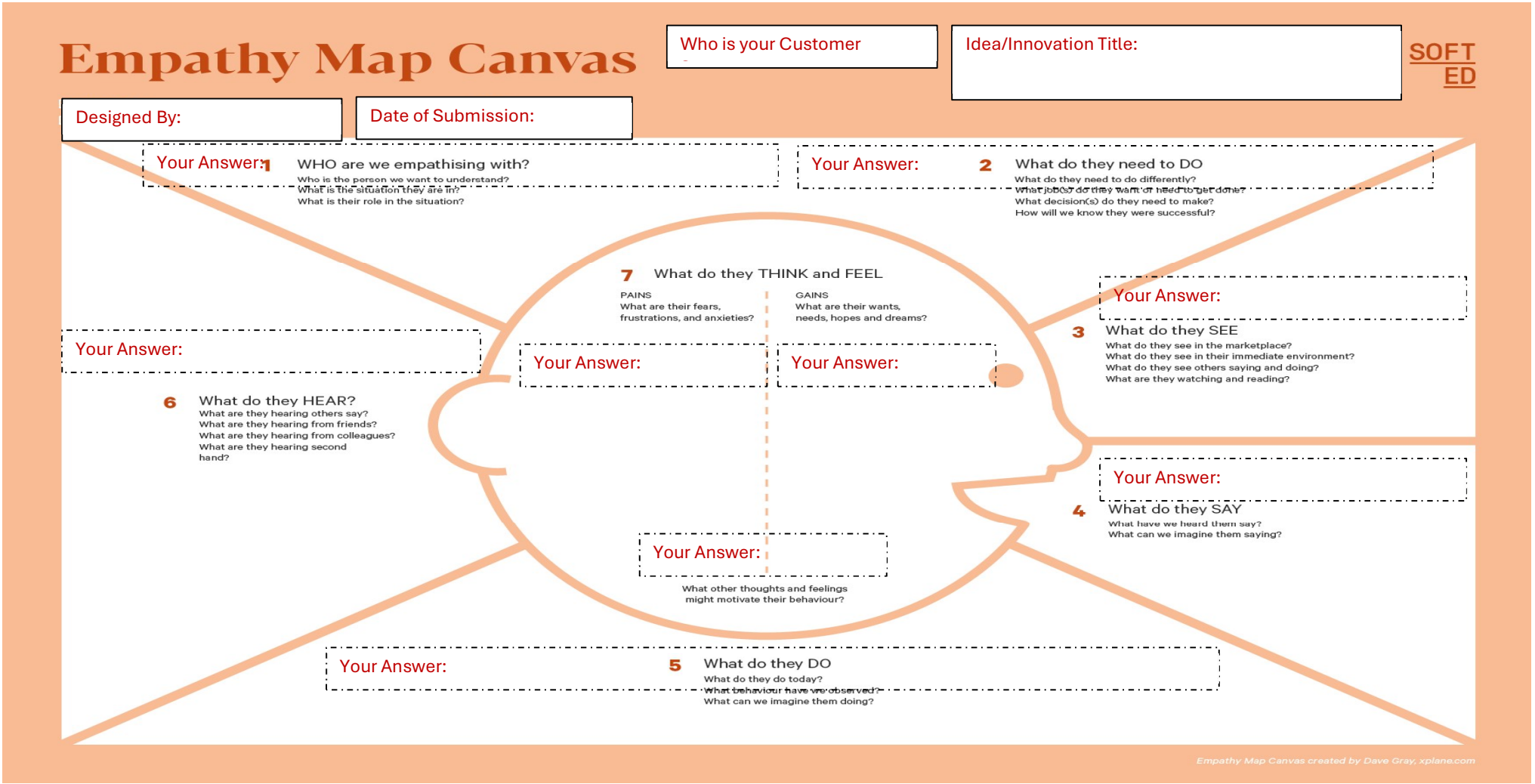
I need to know (thoughts, feelings, actions)	Questions I will ask (open questions)	Insights I hope to gain
Thoughts	What challenges do you face during the job application process?	Understand users' thoughts on current application difficulties.
	How do you decide which job offers are worth applying for?	Learn users' thought process in evaluating job postings.
Feelings	How do you feel when waiting for a response after submitting a resume?	Gauge emotions like anxiety, frustration, or indifference.
	What emotions come up when a job rejection occurs?	Understand emotional reactions and coping strategies
actions	What do you do to improve your chances of getting hired?	Identify the actions applicants take to optimize their resumes.
	How do you approach resume customization for different jobs?	Gain insight into how frequently and thoroughly applicants tailor their resumes.

SKILLED INTERVIEW REPORT

User/Interviewee	Questions Asked	Insights gained
Tatva T, Student	What challenges do you face during the job application process?	Many users find online application platforms to be confusing and inconsistent.
Ramana. M, Parent	How do you feel when waiting for a response after submitting a resume?	Users experience frustration and anxiety during long wait times for responses.
Priya M, Job Seeker	What do you do to improve your chances of getting hired?	Many job seekers rely heavily on LinkedIn updates to get noticed by recruiters.
Jay Ram. M , Tech Professional	How do you approach resume customization for different jobs?	Most applicants believe that slight modifications of resumes improve their chances.

Key Insights Gained:

- **Many users feel overwhelmed by inconsistent job application processes across platforms.**
- **Job seekers frequently experience anxiety and frustration during long waiting periods after applying.**


Empathy Map Canvas
Who is your Customer
Idea/Innovation Title:
SOFT ED
Designed By:
Date of Submission:
Your Answer:
1 WHO are we empathising with?
Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?
Your Answer:
2 What do they need to DO
What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?
7 What do they THINK and FEEL
PAINS
What are their fears, frustrations, and anxieties?
GAINS
What are their wants, needs, hopes and dreams?
Your Answer:
Your Answer:
Your Answer:
3 What do they SEE
What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?
Your Answer:
6 What do they HEAR?
What are they hearing others say?
What are they hearing from friends?
What are they hearing from colleagues?
What are they hearing second hand?
Your Answer:
4 What do they SAY
What have we heard them say?
What can we imagine them saying?
Your Answer:
What other thoughts and feelings might motivate their behaviour?
Your Answer:
5 What do they DO
What do they do today?
What behaviour have we observed?
What can we imagine them doing?
Empathy Map Canvas created by Dave Gray, xplane.com

Empathy Map

4. Empathy Map

a. **Who is your Customer?**

Description: This is where you specify the customer or user you are empathizing with. It could be a specific user persona or a general user segment.

Key points:

- **Define the customer profile clearly (e.g., age, profession, interests).**
- **State their goals and needs related to the innovation or product.**
- **Context in which the user will interact with your solution.**

b. **Who are we empathizing with?**

Description: This area helps you define who the user is, what their situation looks like, and what role they play. It emphasizes understanding the user's perspective in depth.

Key points:

- **Define the user's characteristics (e.g., personality, values, and responsibilities).**
- **State the user's goals and challenges in their environment.**
- **What is the user's broader situation (professionally or personally)?**

c. **What do they need to DO?**

Description: This section identifies what actions or tasks the user needs to perform. It helps highlight the expectations and demands the user faces.

Key points:

- **Clarify the tasks or actions the user needs to complete.**
- **What decisions do they need to make?**
- **How do they define success or failure in their tasks?**

d. **What do they SEE?**

Description: This focuses on the visual stimuli or environment that the user interacts with. It's important to consider what users see in their immediate surroundings and in their larger world.

Key points:

- **What do users see in their physical and digital environment?**
- **What trends or competitors do they notice?**
- **How do these visual elements influence their behavior?**

e. **What do they SAY?**

Description: This section captures what the user might say in public, such as comments or feedback they give in conversations or on social media.

Key points:

- **What might users express openly in conversation about their problems?**
- **How do they express their goals or frustrations?**
- **What are their words during customer interviews or feedback?**

f. **What do they DO?**

Description: This section focuses on what the user does, the actual behaviors they exhibit, and actions they take in different situations.

Key points:

- **What observable actions do users take?**
- **What habits or routines do they follow?**
- **What might users do to try and solve their problems?**

g. **What do they HEAR?**

Description: This addresses what information the user receives from external sources, such as colleagues, media, or industry trends. It helps map the influences surrounding the user.

Key points:

- **What are they hearing from peers, mentors, or the industry?**
- **What media or channels of information are they exposed to?**
- **Are there any strong influencers guiding their behavior?**

h. **What do they THINK and FEEL?**

Description: This is one of the most insightful sections, addressing the internal emotions, concerns, and motivations of the user. It helps identify their deep-rooted feelings.

Key points:

- **What are their fears, worries, and anxieties?**
- **What are their motivations and desires?**
- **How do their thoughts and feelings align with their actions?**

i. **Pains and Gains**

Description: This section focuses on the user's frustrations and their desired outcomes. It helps to frame the user's challenges (pains) and the benefits they seek (gains).

Key points:

- **What are the user's main pain points?**
- **What would make their life easier or more fulfilling?**
- **What benefits do they hope to achieve from your product or solution?**

8. Persona of Stakeholders

Stakeholder Name:

Demographics: **Key characteristics of your target audience, such as age, gender, income, and location.**

Goals: **What the stakeholders or customers want to achieve in relation to the innovation.**

Challenges: **The obstacles or difficulties faced by stakeholders that the innovation aims to address.**

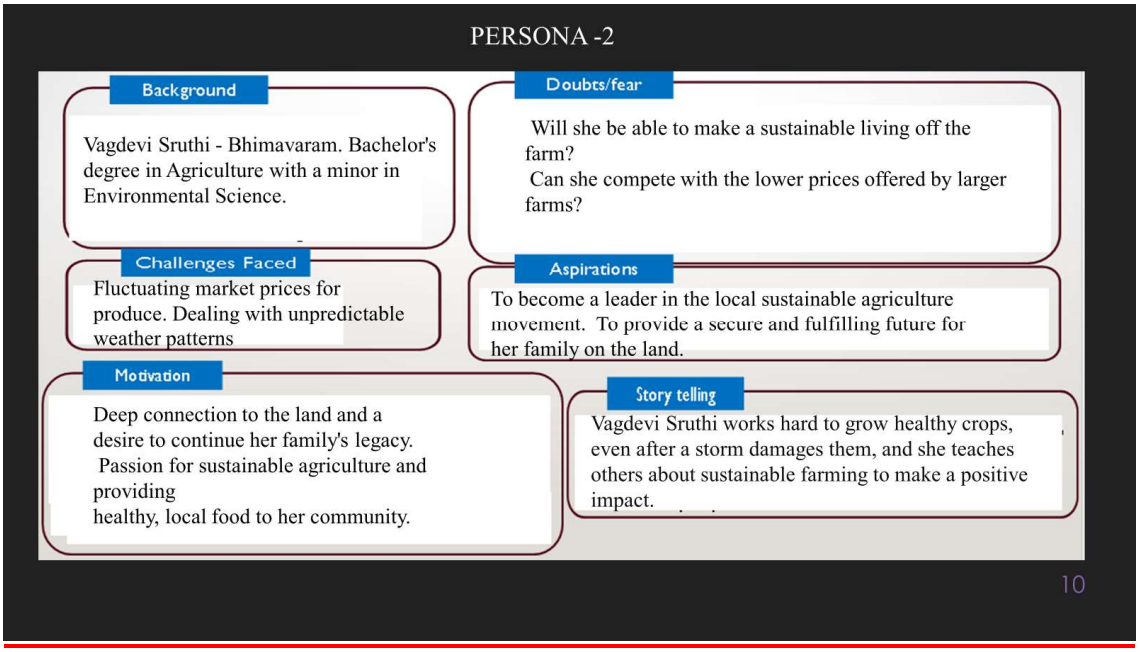
Aspiration: **The long-term desires or dreams of your target audience related to the innovation.**

Needs: **The essential requirements of your customers or stakeholders that must be met.**

Pain Points: **Specific problems or frustrations experienced by the target audience.**

Storytelling: **A narrative that highlights the journey of the stakeholder or customer, illustrating the problem and how the innovation can solve it.**

Sample:


PERSONA -2
Background
Vagdevi Sruthi - Bhimavaram. Bachelor's degree in Agriculture with a minor in Environmental Science.
Doubts/fear
Will she be able to make a sustainable living off the farm?
Can she compete with the lower prices offered by larger farms?
Challenges Faced
Fluctuating market prices for produce. Dealing with unpredictable weather patterns
Aspirations
To become a leader in the local sustainable agriculture movement. To provide a secure and fulfilling future for her family on the land.
Motivation
Deep connection to the land and a desire to continue her family's legacy.
Passion for sustainable agriculture and providing
healthy, local food to her community.
Story telling
Vagdevi Sruthi works hard to grow healthy crops, even after a storm damages them, and she teaches others about sustainable farming to make a positive impact.
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10. Look for Common Themes, Behaviors, Needs, and Pain Points among the Users

Analyse the data from your affinity diagram to uncover recurring patterns among your users, helping you better understand their expectations and challenges.

Common Themes: **Identify broad ideas or issues that repeatedly appear across different groups in your affinity diagram.**

Common Behaviors: **Observe how users consistently act or respond in relation to the problem or product throughout their journey.**

Common Needs: **Pinpoint essential requirements or desires that many users share, highlighting what they need for a better experience.**

Common Pain Points: **Look for frustrations or obstacles that frequently hinder the user experience, which your project can address.**

12. Define Needs and Insights of Your Users

User Needs: **Define the core requirements your users have in relation to the problem or product. These could be functional, emotional, or societal needs that your solution must address.**

User Insights: **Summarize the key understandings or observations you've uncovered about your users' behaviors, motivations, and pain points. These insights provide a deeper understanding of why users behave the way they do and what drives their decisions.**

13. POV Statements

POV Statements:

- [User] needs a way to [need] because [insight].

PoV Statements **(At least ten)**	**Role-based or Situation-Based**	**Benefit, Way to Benefit,** **Job TBD,** **Need (more/less)**	**PoV Questions** **(At least one per statement)**
(Erase this example) When I drive to work, I want to avoid traffic jams so I don't get in trouble with my boss for being late.	Situation	Way to Benefit	What can we design that will enable drivers to avoid traffic jams? What can we design that will enable workers to avoid getting in trouble for being late to work?

14. Develop POV/How Might We (HMW) Questions to Transform Insights/Needs into Opportunities for Design

Turn your user needs and insights into actionable opportunities by framing them as "How Might We" (HMW) questions. These questions will spark creative problem-solving and guide your innovation process.

1. **How Might We: Based on the needs and insights you've identified, create open-ended questions starting with "How might we...?" These questions should aim to solve user pain points, enhance the experience, or address specific needs.**

Examples:

- **User Need: "Users need a quicker way to access customer support."**
  - **HMW Question: "How might we create a more efficient and accessible customer support system?"**

- **Insight: "Users feel overwhelmed by too many options."**
  - **HMW Question: "How might we simplify decision-making for our users?"**

Task:

Write 3-5 "How Might We" questions based on your analysis of user needs and insights. These questions should challenge you to think of innovative solutions that can address user problems in meaningful ways.

This task encourages participants to think creatively about solving user problems, transforming challenges into opportunities for innovation.

User Need/Insight	"How Might We" Question
[State the user need or insight clearly]	How might we... [formulate an open-ended question to address the need or insight]?

16. Crafting a Balanced and Actionable Design Challenge

The Design Challenge Should Neither Be Too Narrow Nor Too Broad and It Should Be an Actionable Statement with a quantifiable goal. It should be a culmination of the POV questions developed.

Design Challenge: [Actionable Statement]

17. Validating the Problem Statement with Stakeholders for Alignment

Ensure your problem statement accurately represents the needs and concerns of your stakeholders and users. This involves gathering feedback from these groups to confirm that the problem is relevant and significant from their perspective. By validating early, you can refine the problem statement to better align with real-world challenges, ensuring your solution addresses the correct issues.

Validation Plan:

Stakeholder/User Feedback (Min. 10 Stakeholders/Experts):

Stakeholder/User	Role	Feedback on Problem Statement	Suggestions for Improvement
[Name/Group]	**[Role/Title]**	**[Does the problem resonate with them? Why or why not?]**	**[Suggestions for refining the problem statement]**
[Name/Group]	**[Role/Title]**	**[Does the problem resonate with them? Why or why not?]**	**[Suggestions for refining the problem statement]**

18. Ideation

Ideation Process:

Idea Number	Proposed Solution	Key Features/Benefits	Challenges/Concerns
Idea 1	[Brief description of solution]	[What are the key benefits of this solution?]	[What challenges or concerns exist?]
Idea 2	[Brief description of solution]	[What are the key benefits of this solution?]	[What challenges or concerns exist?]
Idea 3	[Brief description of solution]	[What are the key benefits of this solution?]	[What challenges or concerns exist?]
Idea 4	[Brief description of solution]	[What are the key benefits of this solution?]	[What challenges or concerns exist?]
Idea 5	[Brief description of solution]	[What are the key benefits of this solution?]	[What challenges or concerns exist?]

18. Idea Evaluation

Evaluate the Idea based on 10/100/1000 grams

Idea	Impact (10/100/1000 grams)	Feasibility (10/100/1000 grams)	Alignment (10/100/1000 grams)	Total Weight
Idea 1	**[Assign weight]**	**[Assign weight]**	**[Assign weight]**	**[Sum of weights]**
Idea 2	**[Assign weight]**	**[Assign weight]**	**[Assign weight]**	**[Sum of weights]**
Idea 3	**[Assign weight]**	**[Assign weight]**	**[Assign weight]**	**[Sum of weights]**
Idea 4	**[Assign weight]**	**[Assign weight]**	**[Assign weight]**	**[Sum of weights]**
Idea 5	**[Assign weight]**	**[Assign weight]**	**[Assign weight]**	**[Sum of weights]**

Example:

Idea	Impact (10/100/1000 grams)	Feasibility (10/100/1000 grams)	Alignment (10/100/1000 grams)	Total Weight
Idea 1	**1000**	**100**	**1000**	**2100**
Idea 2	**100**	**1000**	**100**	**1200**
Idea 3	**100**	**100**	**100**	**300**

Further, use solution concept form to scrutinize the idea

Solution Concept Form

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1. Problem Statement:

- **[State the validated problem your solution addresses.]**

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2. Target Audience:

- **[Describe the main users or customers who will benefit from this solution.]**

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3. Solution Overview:

- **[Provide a brief description of the solution concept.]**

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4. Key Features:

Feature	Description
Feature 1	[Briefly describe the main feature of your solution]
Feature 2	[Briefly describe another key feature]
Feature 3	[Briefly describe a third key feature]

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5. Benefits:

Benefit	Description
Benefit 1	[What value does this solution bring?]
Benefit 2	[How does this solution solve the problem?]
Benefit 3	[What makes this solution stand out?]

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6. Unique Value Proposition (UVP):

- **[Summarize why this solution is unique and why it will appeal to your target audience.]**

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7. Key Metrics:

Metric	Measurement
Metric 1	[What is the key metric to measure success?]
Metric 2	[What is another key metric for tracking progress?]

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8. Feasibility Assessment:

- **[Provide a brief evaluation of how achievable or practical this solution is (consider resources, time, and technology).]**

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9. Next Steps:

- **[Outline the next steps for further developing or prototyping this solution.]**
