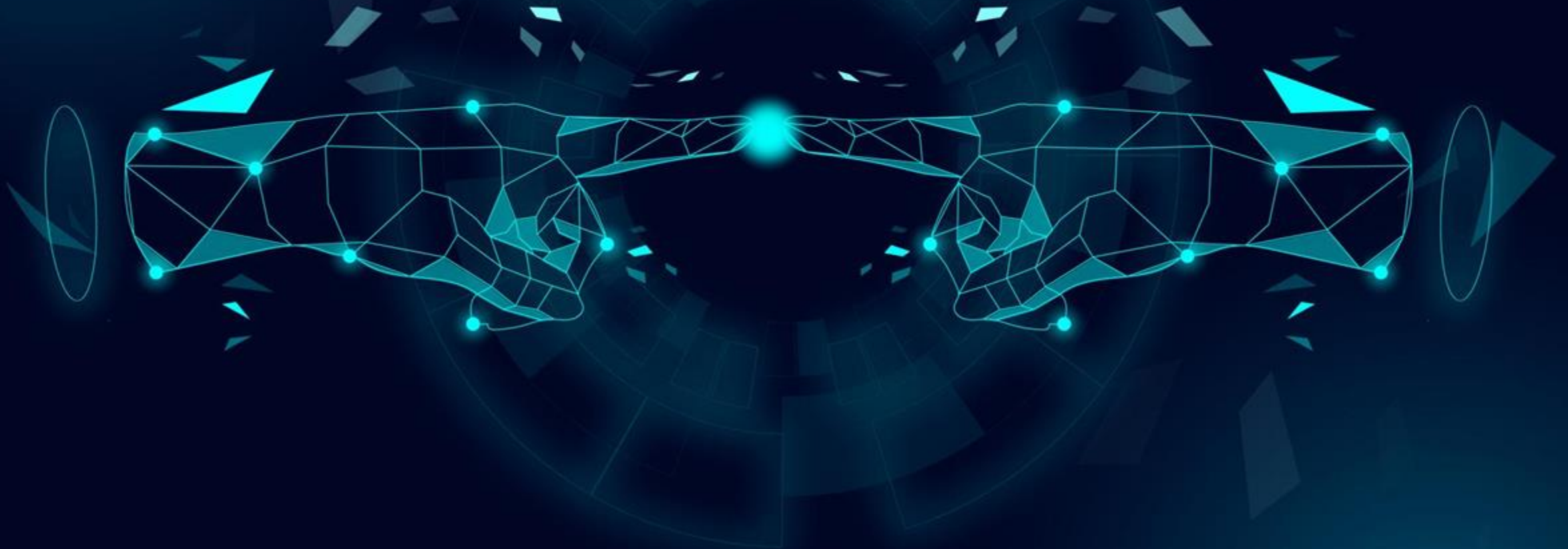


Approach to AI Design application



Content

- Approach to Design AI application
- Stage 1: Understand
- Stage 2: Identify
- Stage 3: Ideate
- Stage 4: Pitch

Approach to Design AI application



Understand
(Reading case study)



Identify
(Finding users and a problem statement)



Ideate
(Brainstorming about solutions)



Pitch
(Communicating solutions)

Case Study of AI in:



Education



Health Care



Automobile



Food process Industry



Electricians



Architectural Assistant

Also you can choose and research as per your interest area!!



Manufacturing Industry



Fashion Industry



E- Commerce Industry



IT Services



Team Creation

(Max team size: 4)

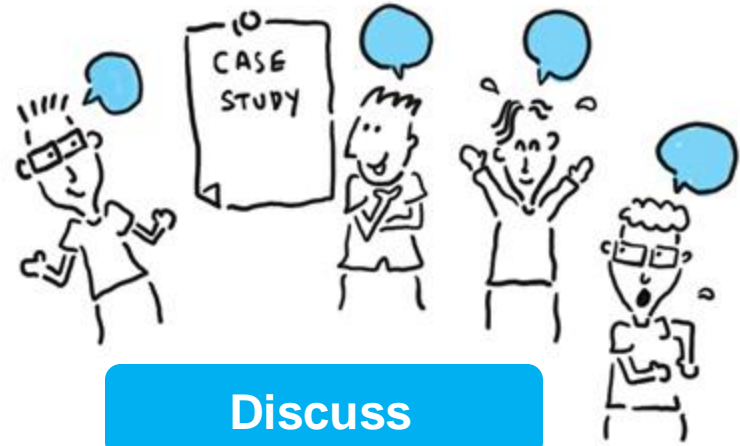


Stage 1: Understand (Reading case study)

The four tasks in this stage



Read



Discuss



Analyse



Research



Let's Explore Some Problem Areas

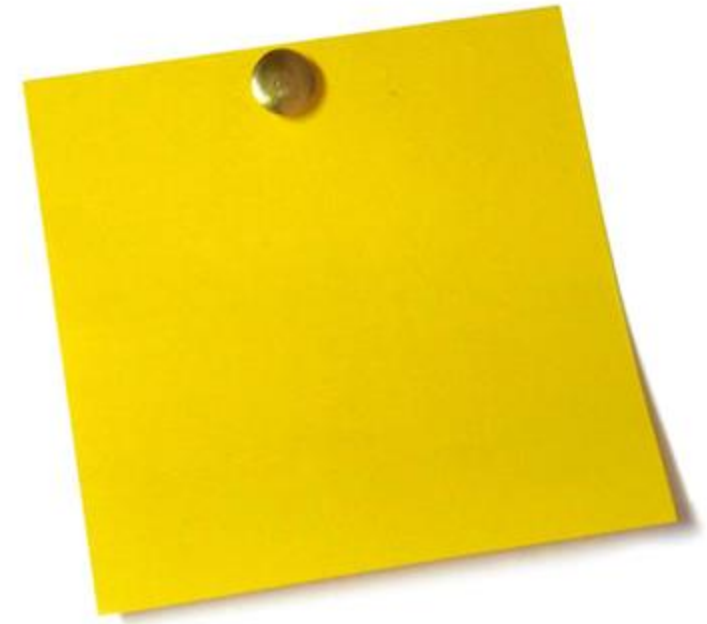
Group Exercise

- Participants can divide themselves into groups of 2-4 based on their area of interest.
- Hand out case studies.
- Each group to read/design their case study then discuss it.
- Each group has to list out the problem area based on their learning from the case study as well as personal knowledge, group discussion and research.



Outcomes:

- Team to decide a single problem area which you want to work on.
- Ensure that the problem definition does NOT contain any solution aspect to it and only states the problem.





Stage 2: Identify

(Finding users and a problem statement)

Identify



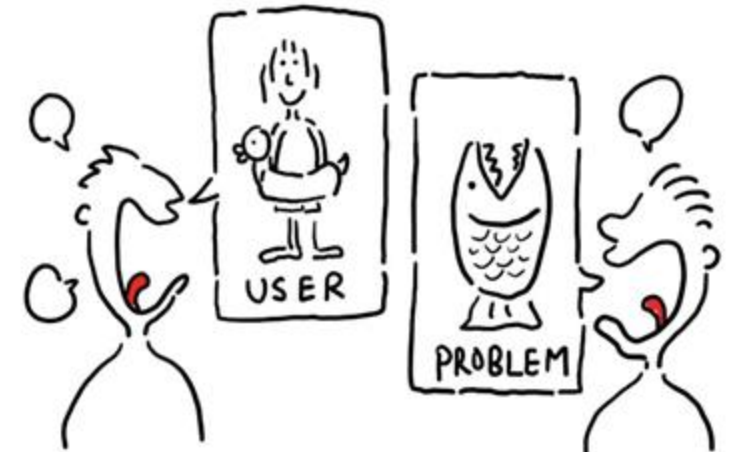
Analyze



Select



Describe



Necessity is the Mother of Invention

The more you know about the user, the more likely it is that you can create successful innovations.



User Identification

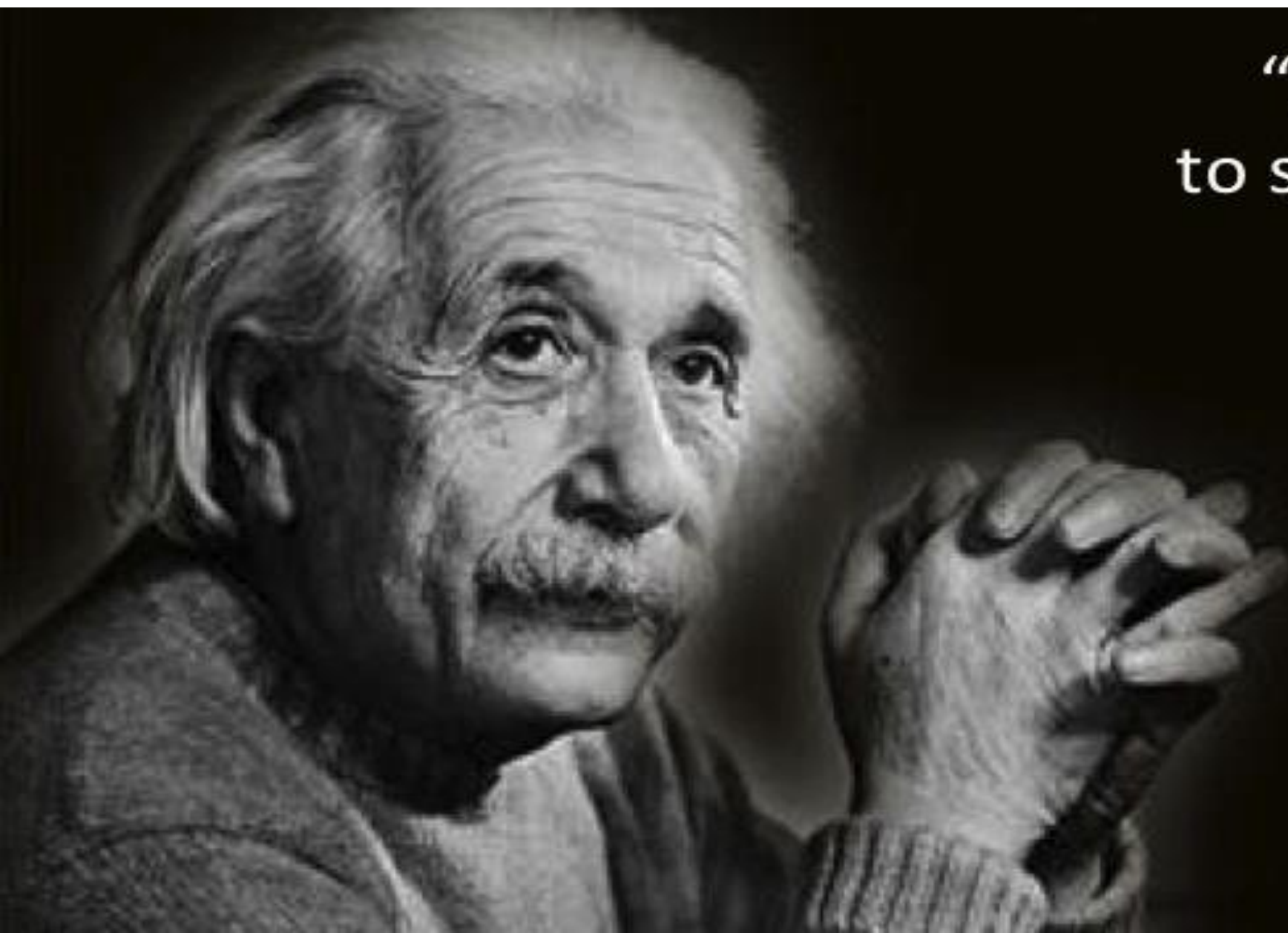
- A product or service will only be a successful if the users want to use it.
- Before we start developing ideas for a solution, we must target our potential users and make sure we have a good understanding of the situation and their problems.



Activity

Select the primary user group you wish to focus on





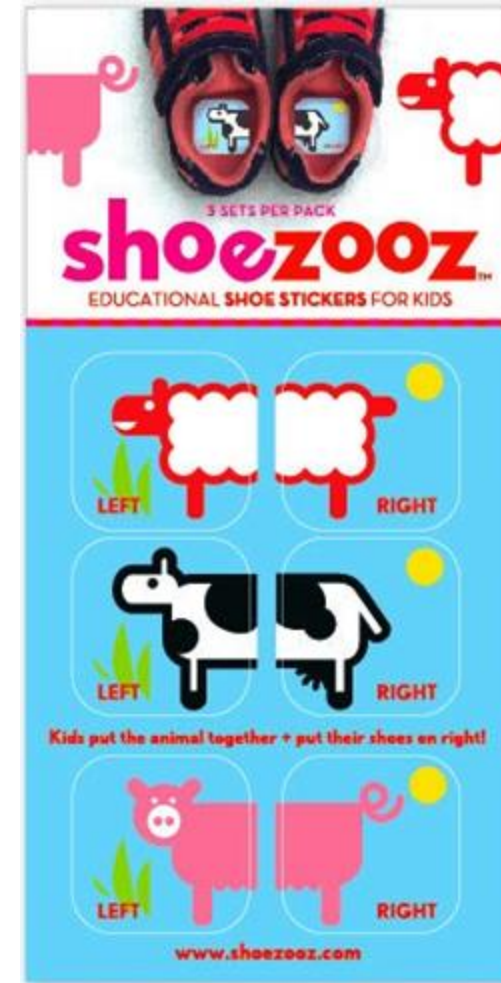
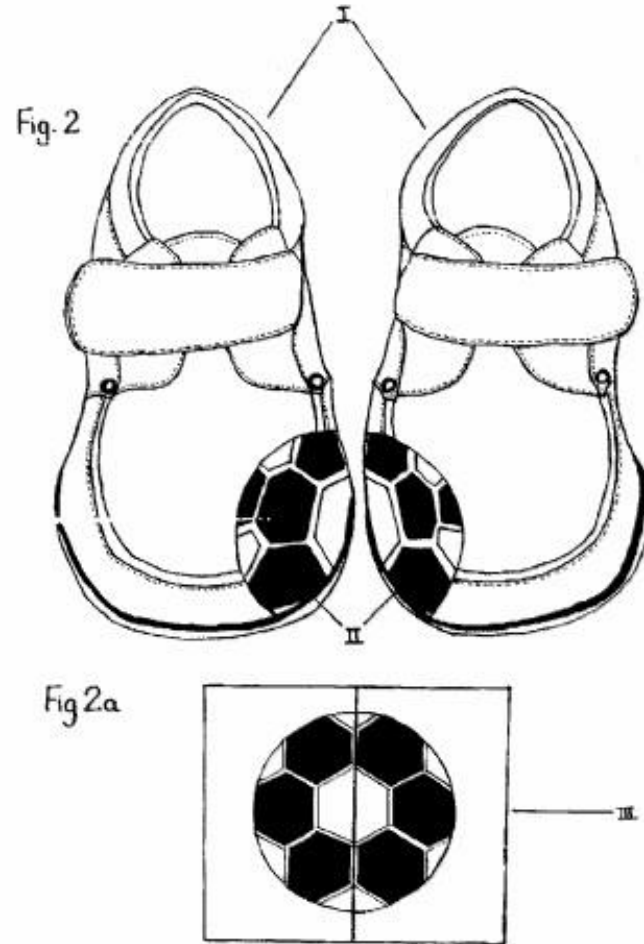
“If I had an hour
to solve a problem
I'd spend
55 minutes
thinking about
the problem
and 5 minutes
thinking about
solutions.”

— Albert Einstein

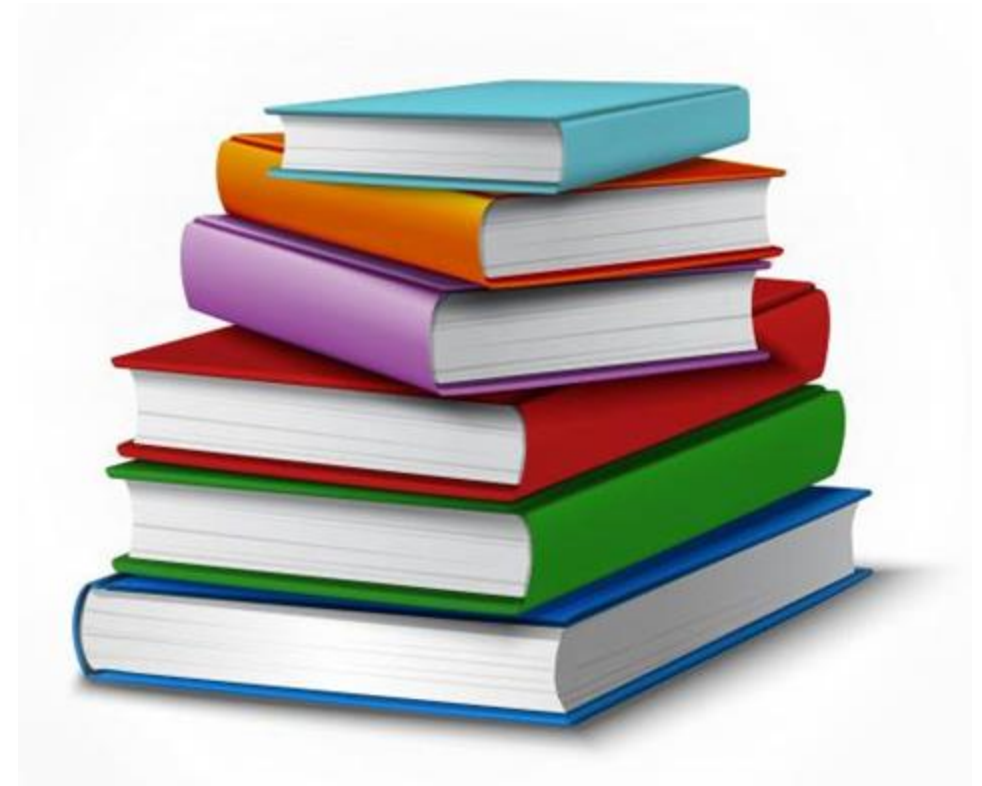
Painstorming



What's the toughest part of putting on shoes for a 2 year old?



What are the pains in organizing books?



Organizing Books



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The pains with this design?

- Opening the bottle
- Getting the ketchup out in a controlled fashion
- Ketchup gets dry around the opening
- Getting the last portion of the ketchup out
- Glass can break – a safety hazard



Painstorming

- Millions of women and girls spend many hours doing each year — fetching water
- Balance heavy jerry cans on the head
- Backbreaking work
- Sometimes causes crippling injuries.
- Villagers carry the water container on the head just like their parents and grandparents

But the method did not change until ...



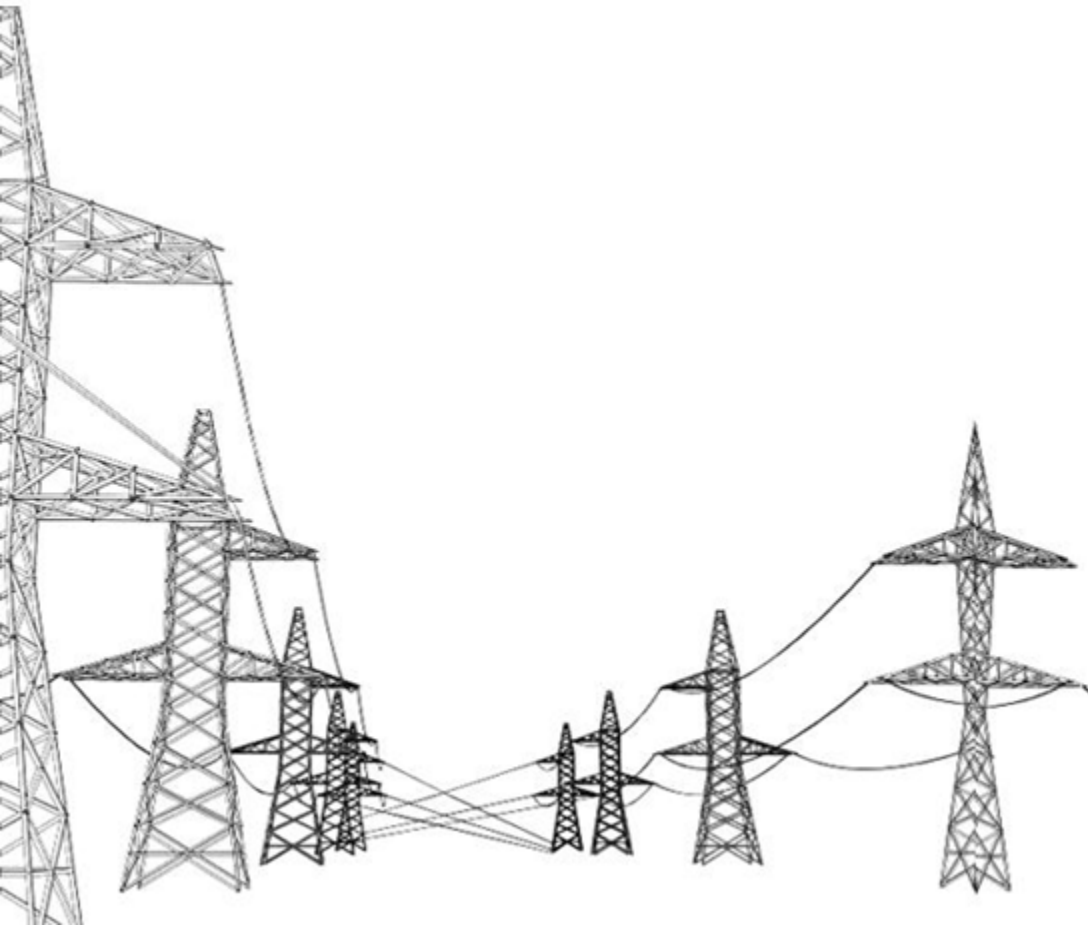
Painstorming – Q Drum



<http://www.nytimes.com/2007/05/29/science/29cheap.html?scp=3&sq=design%20problem&st=cse>

AI solution in Electricity- Example

Siemens has released a software package to operate grids autonomously known as active network management (ANM).



ANM tracks how a grid interacts with different loads of energy and tweaks its adjustable parts to increase efficiency.

AI at Construction Sites

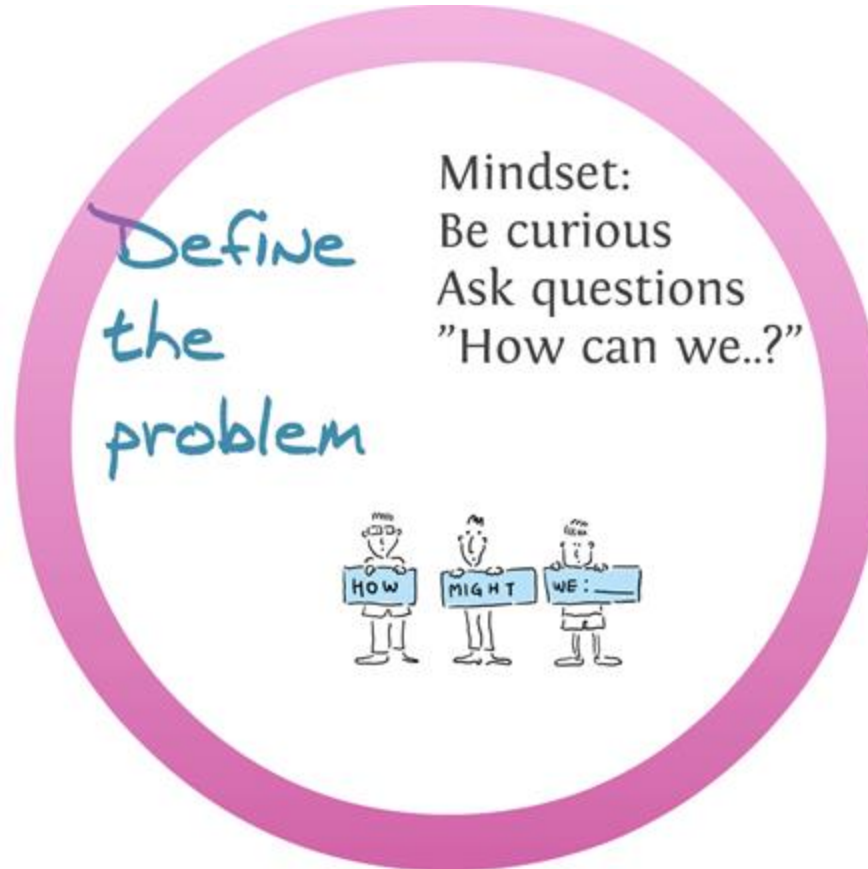
- Sam- the brick- laying robot is created by New York-based Construction Robotics.
- This bricklaying robot promises to both increase productivity while reducing overall labor costs.



Describe: Scope

Write down one very precise problem statement!

“How can we help X SPECIFIC USER solve X SPECIFIC PROBLEM”





Stage 3: Ideate

(Brainstorming about solutions)

Four tasks in the stage

Scope



Generate



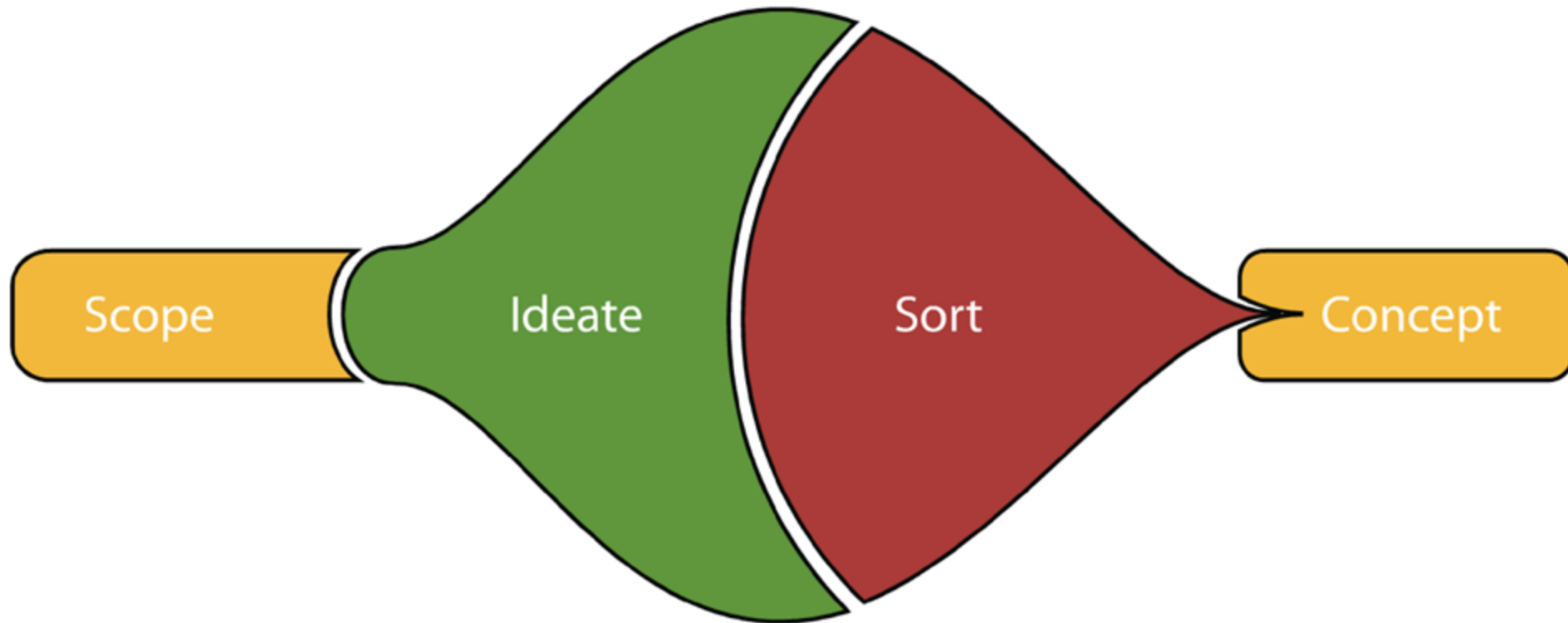
Sort



Describe



The Creative Process



Rules in Creative Process

- Go for quantity
- See opportunities and forget limitations
- Generate as many ideas as possible *quantity over quality!*
- No criticism is allowed :*don't say "no but", say "yes and.."*
- Co-create by building on each others' ideas



*I have not failed 1300 times....
I have
successfully discovered 1300 ways to NOT
make a light bulb*

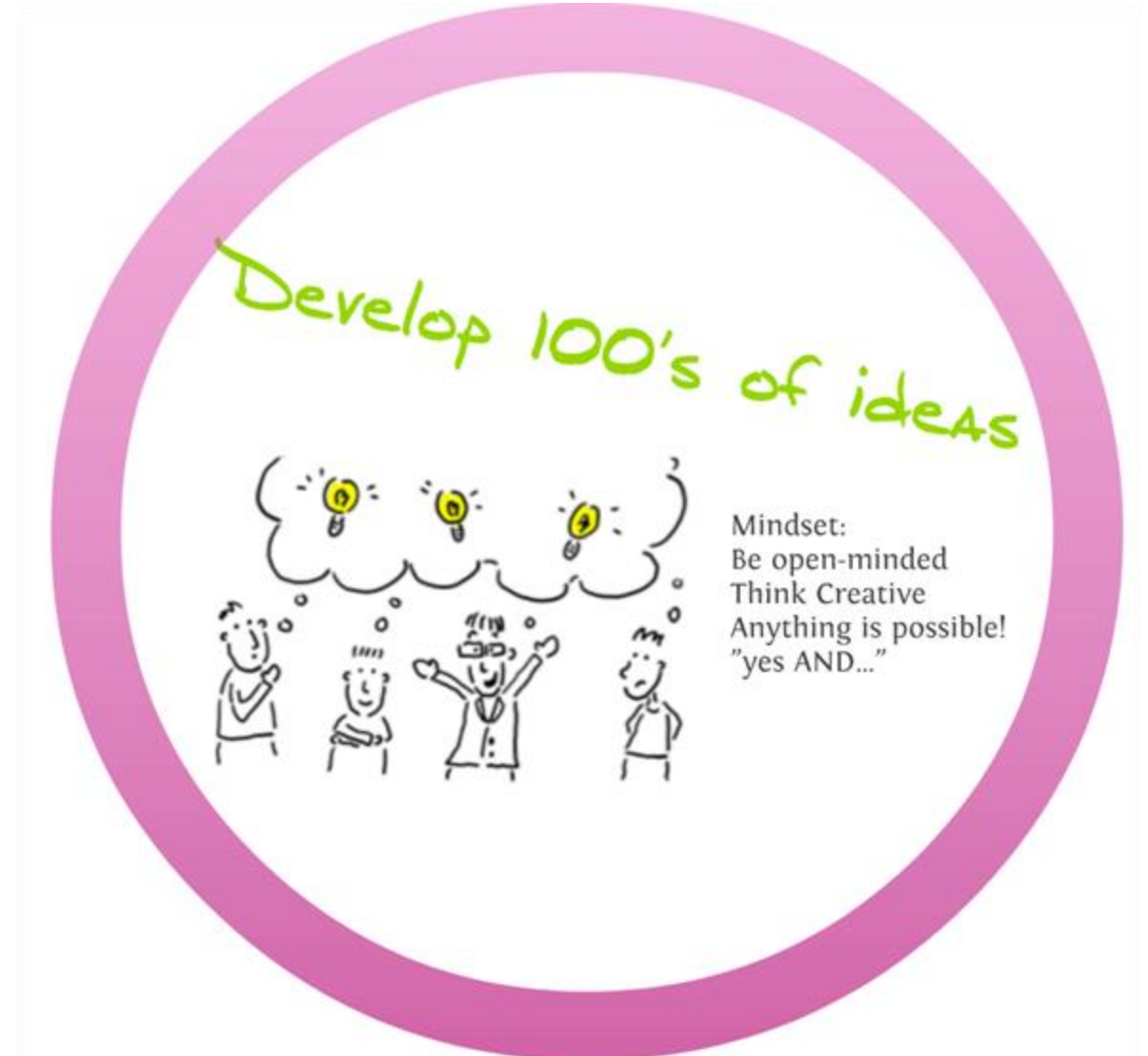
-Thomas Edison

Example of Possible Solution Built using AI

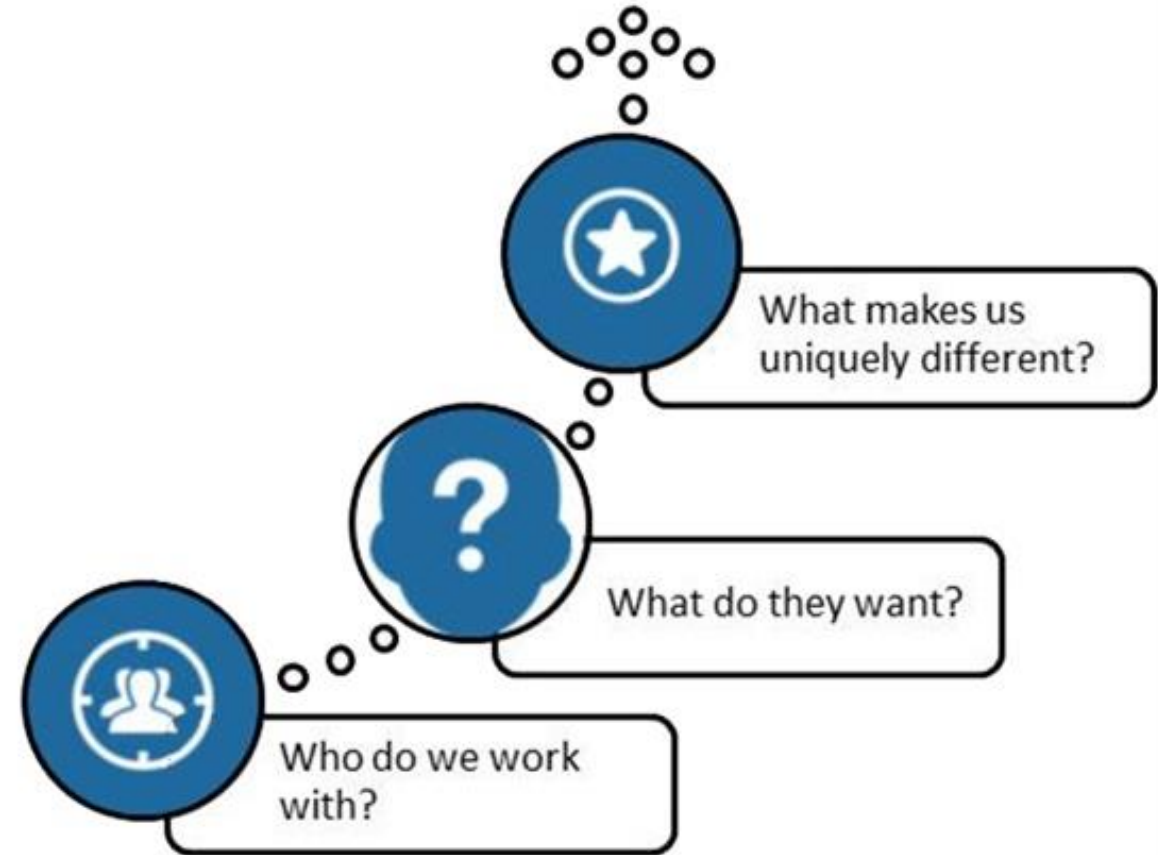
Area	Problem	User	Solution
Health Sector	High medical consultation charges	Educated and lower to middle class people	AI app to give medical consultation based on personal medical history and common medical knowledge.
Entertainment Sector	Manual Recognizing Objects in videos	Company in digitization process.	Deploy AI on a film digitization platform to recognize objects in movie.
Bank Sector	Long waiting time for personal assistance	Bank user	Provide Digital Personal Assistants and Chatbots

Generate

The best way to have a good idea is to have a lot of ideas!



Your solution is converting pain points in to a **VALUE** for the customer



Sort





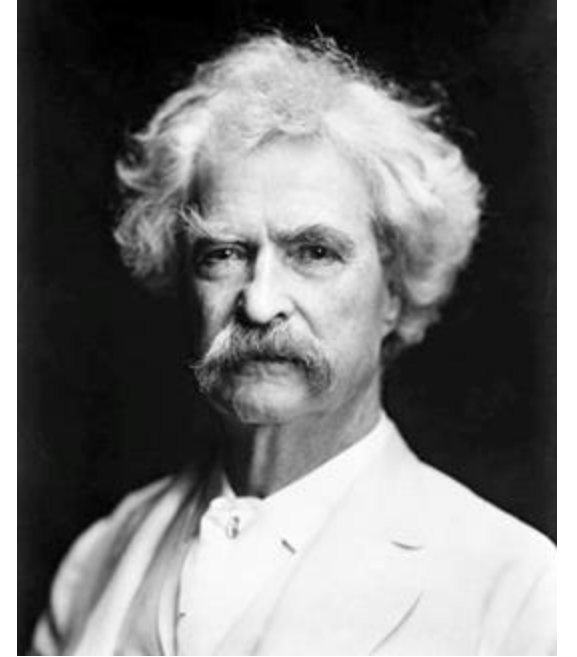
Stage 4: Pitch

(Communicating solutions)

“I didn’t have time to write you a short letter – so I wrote you a long one...”

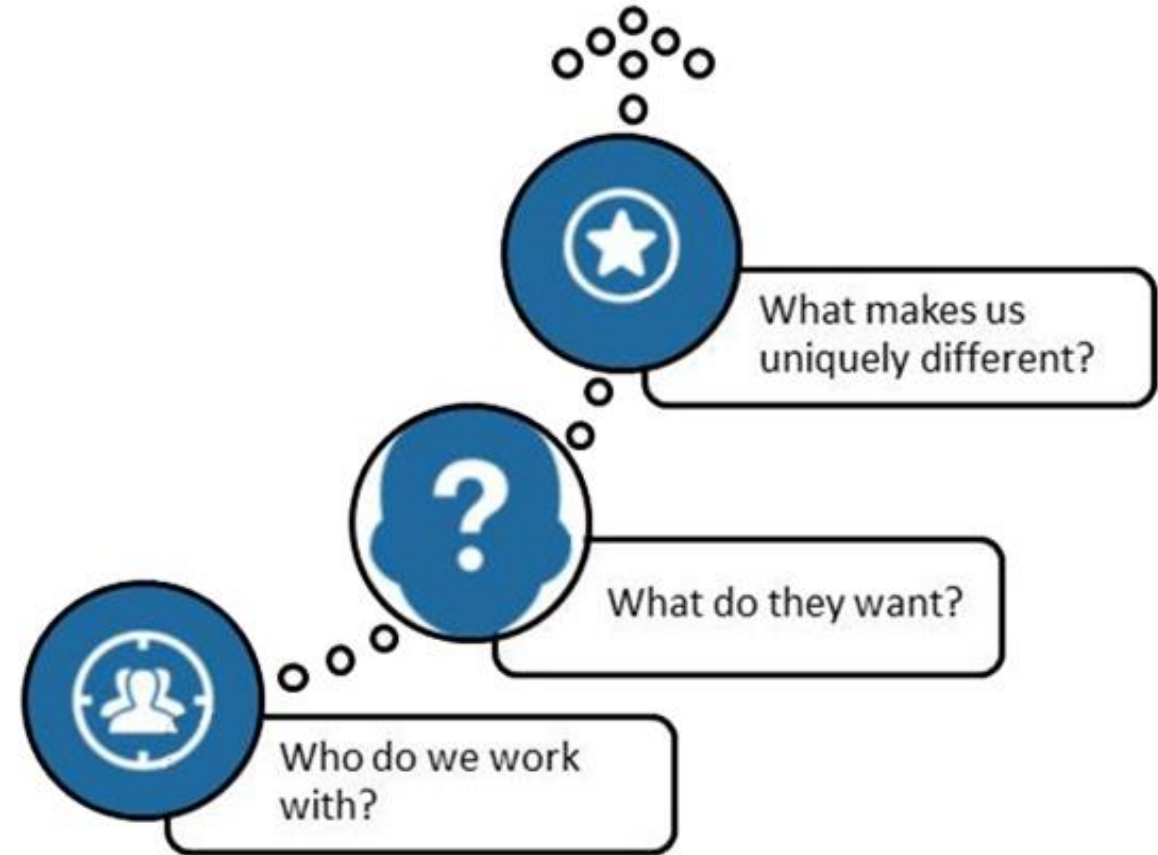


Time Duration: 3 mins



Mark Twain
Famous American
writer

Your solution is converting pain points in to a **VALUE** for the customer



AI solution in Food Process Industry- Example


- Problem - Limited and manual measurements of products in store, as well as delayed data sourced from phone conversations
- Solution - Used Trax Retail Execution image-based technology to take pictures of stores shelves with their mobile devices.



Pitching Template

Pitch structure
Stage 4

startupexperience



1. Problem

Introduce the Challenge and your journey towards it.
What problem are you trying to solve

2. User

Whom are you helping with your solution.

3. Value addition

How do you want to help user . What pain points
you are solving for the user

4. Solution

What is your idea and how does it work. What is
the core functionality of your idea.



Good luck!