

# SIMPLIFYING PROJECT WORKFLOW

We all know managing projects effectively highly impacts the business. I was a part of this ambitious project of building a project management tool for Ramboll Norway HVAC team. Let's see how I enhanced the experience of managing projects and made a positive impact to business.

## PROJECT TEAM

Product Owner      UX Lead      UI Developer      Website – Responsive  
Product Manager    UX/UI Designer    Full Stack Developer

## PLATFORM

## RESPONSIBILITIES

**Research & Analyzing insights** - I was responsible for gathering requirements from internal and stakeholders and also conducting user research, documenting data, synthesizing and analyzing the insights

**Brainstorming & Ideating** - I was responsible for Facilitating Brainstorming sessions with internal and external stakeholders, ideating and iterating

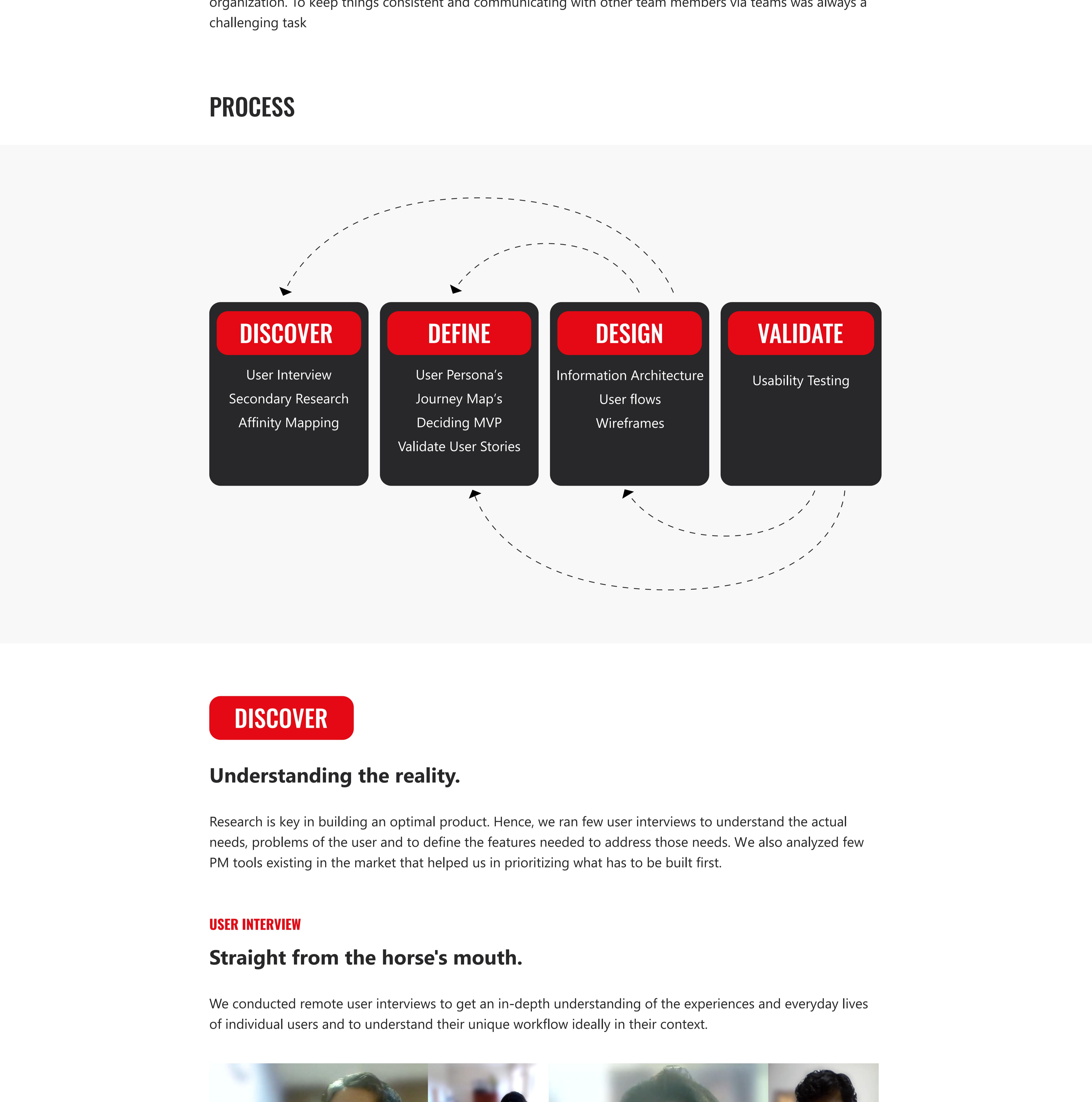
**Design Decisions & Wireframing** - Drafting journey maps, information architecture and user flows. Creating low-Fi and High-Fi wireframes.

**User Interface Designing** - Using Ramboll's design system effectively and adhering to compliance and policies structured by the global design team at Ramboll

**Prototyping & Testing** - I was responsible for converting the wireframes to interactive prototype. Testing it with the end users by conducting Remote usability testing and documenting the insights

**Collaborations & Initiatives** - Collaborating with other team members and understanding their technical approach in solving the problem

**Mentoring** - I was responsible for Mentoring the junior designers in the design team to make them understand the design process, articulating decision decisions and explain some of the internal ux deliverables



## KEY CHALLENGES IDENTIFIED BEFORE DISCOVERY

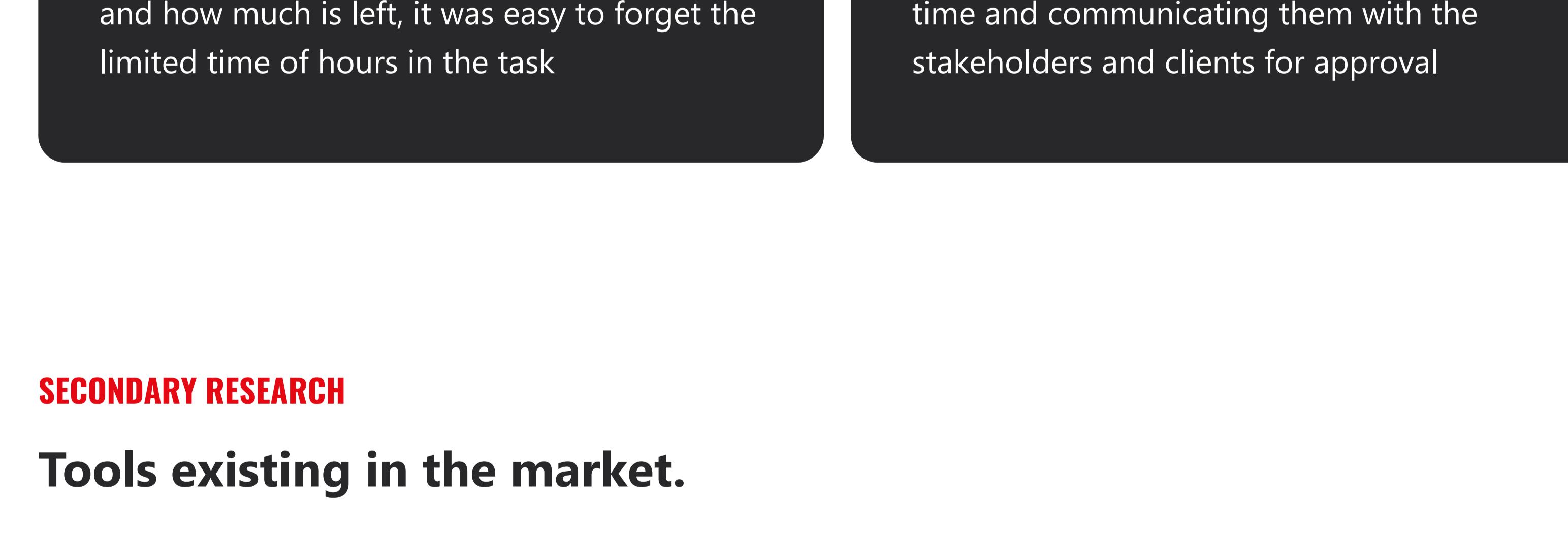
**Every organization has a unique process workflow for delivering their product**  
To understand their existing workflow in detail and different stages in the process

**Integrating the tool with the existing applications used**  
To analyze the existing applications in use, what and how the data is going to be fetched and in what instances the applications has to be used

**Modern and intuitive tools in the market**  
To build a tool with an intuitive and user-friendly interface that simplifies the workflow as people use it on a daily basis

**Working from home due to covid-19**  
We all know implementing user experience is a collaborative process involving many people across the organization. To keep things consistent and communicating with other team members via teams was always a challenging task

## PROCESS



### DISCOVER

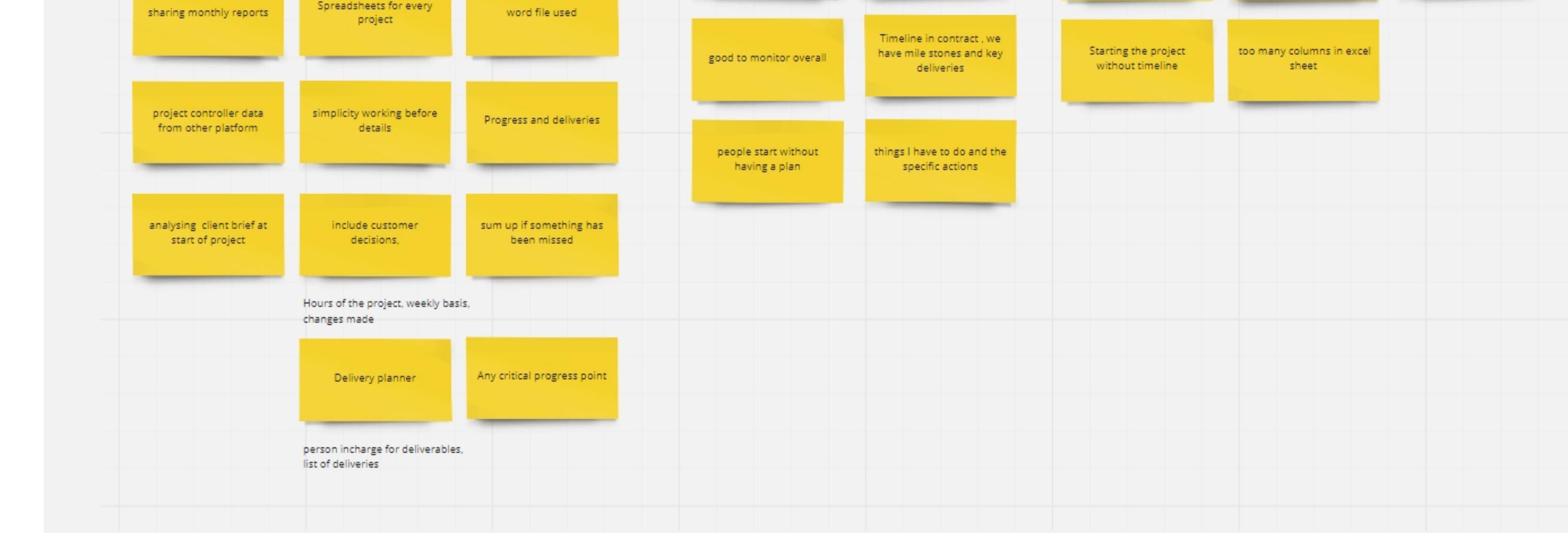
#### Understanding the reality.

Research is key in building an optimal product. Hence, we ran few user interviews to understand the actual needs, problems of the user and to define the features needed to address those needs. We also analyzed few PM tools existing in the market that helped us in prioritizing what has to be built first.

#### USER INTERVIEW

#### Straight from the horse's mouth.

We conducted remote user interviews to get an in-depth understanding of the experiences and everyday lives of individual users and to understand their unique workflow ideally in their context.



#### Recruiting participants.

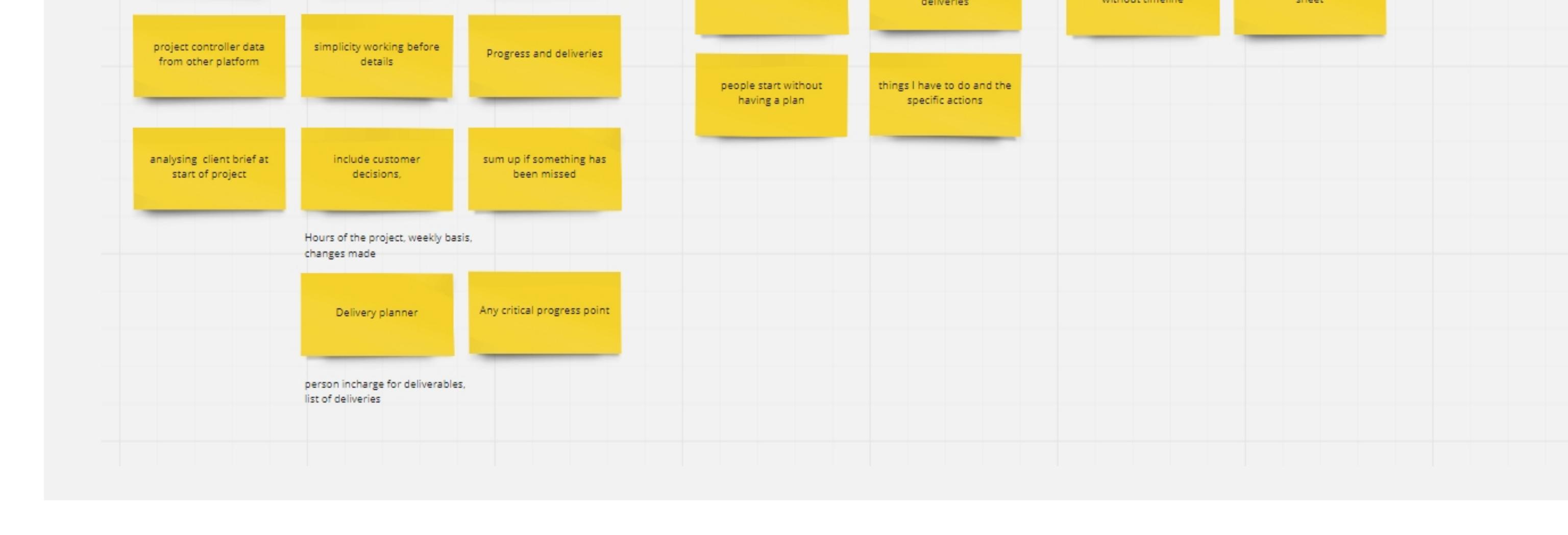
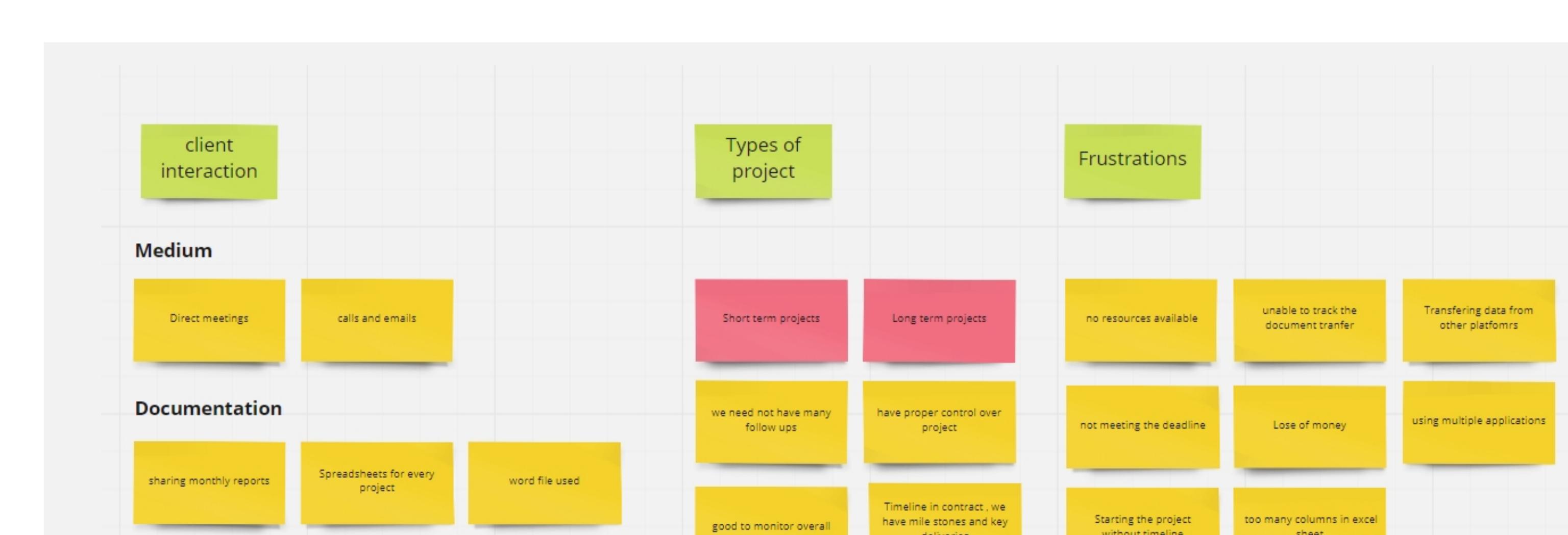
The focus was to gather authentic data from the users to understand their unique workflow. Hence, we required participants with different behaviors. After a discussion with the project management team and other stakeholders we decided to interview:

#### JUNIOR PROJECT MANAGER

#### SENIOR PROJECT MANAGER

#### PROJECT OWNER

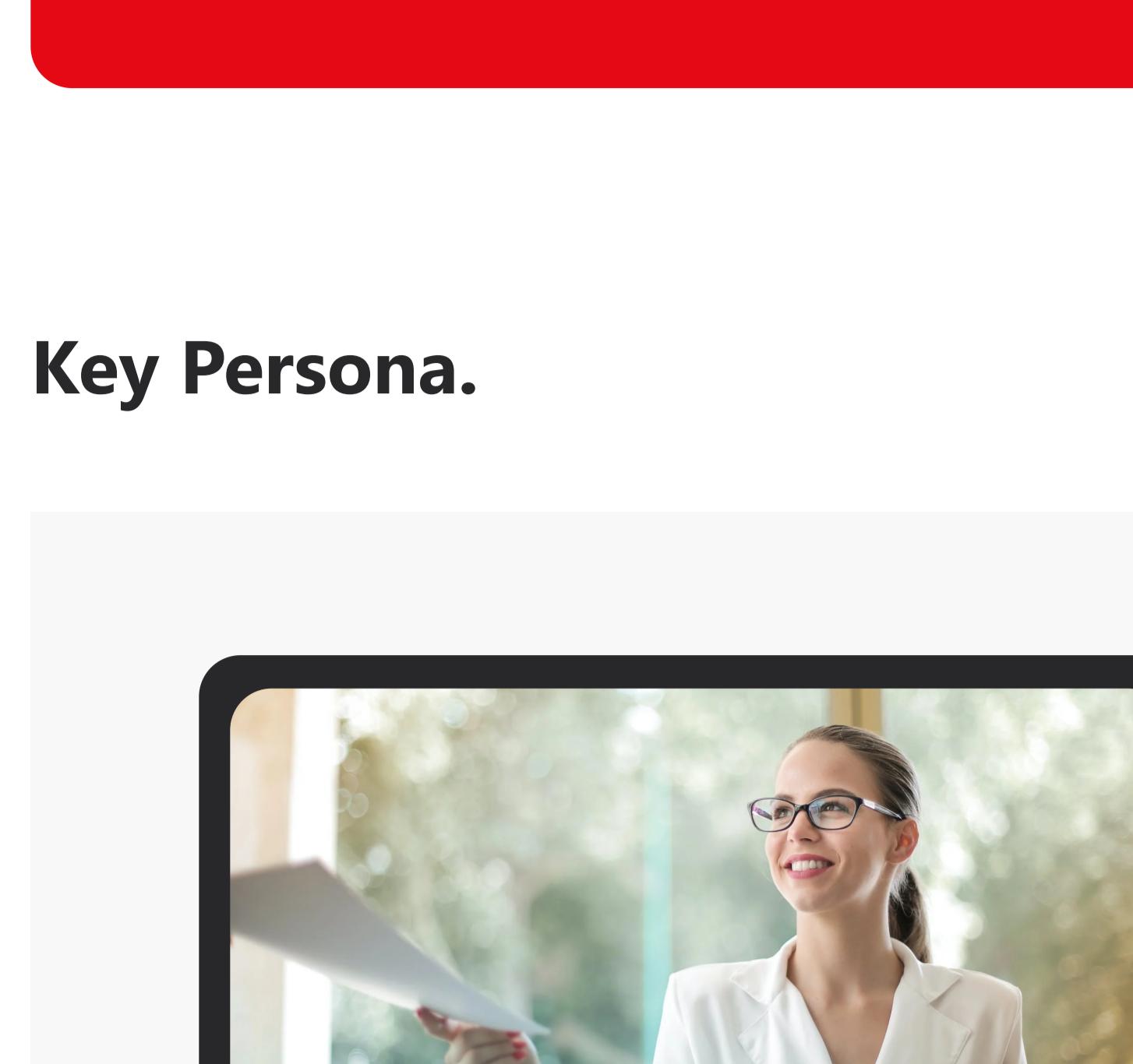
#### Early insight's discovered.



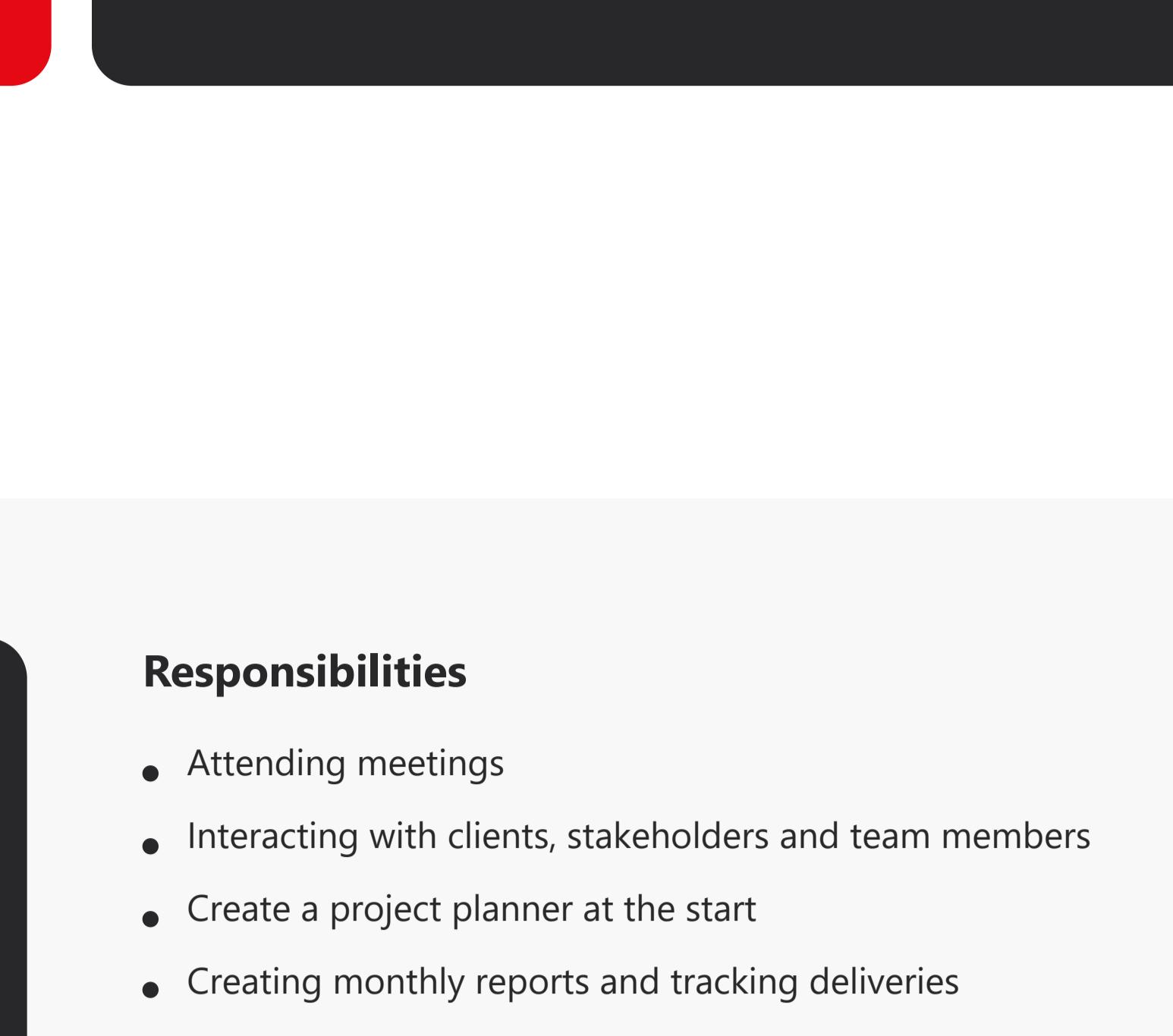
## DEFINE

### Humanizing research data - User personas.

As per the research insights; we identified 2 key personas; **project manager** and project owner. We focused on the **project manager** persona initially since their needs and challenges were more. We discussed the persona with the client and shared it with all the internal stakeholders to align everyone on the same track.

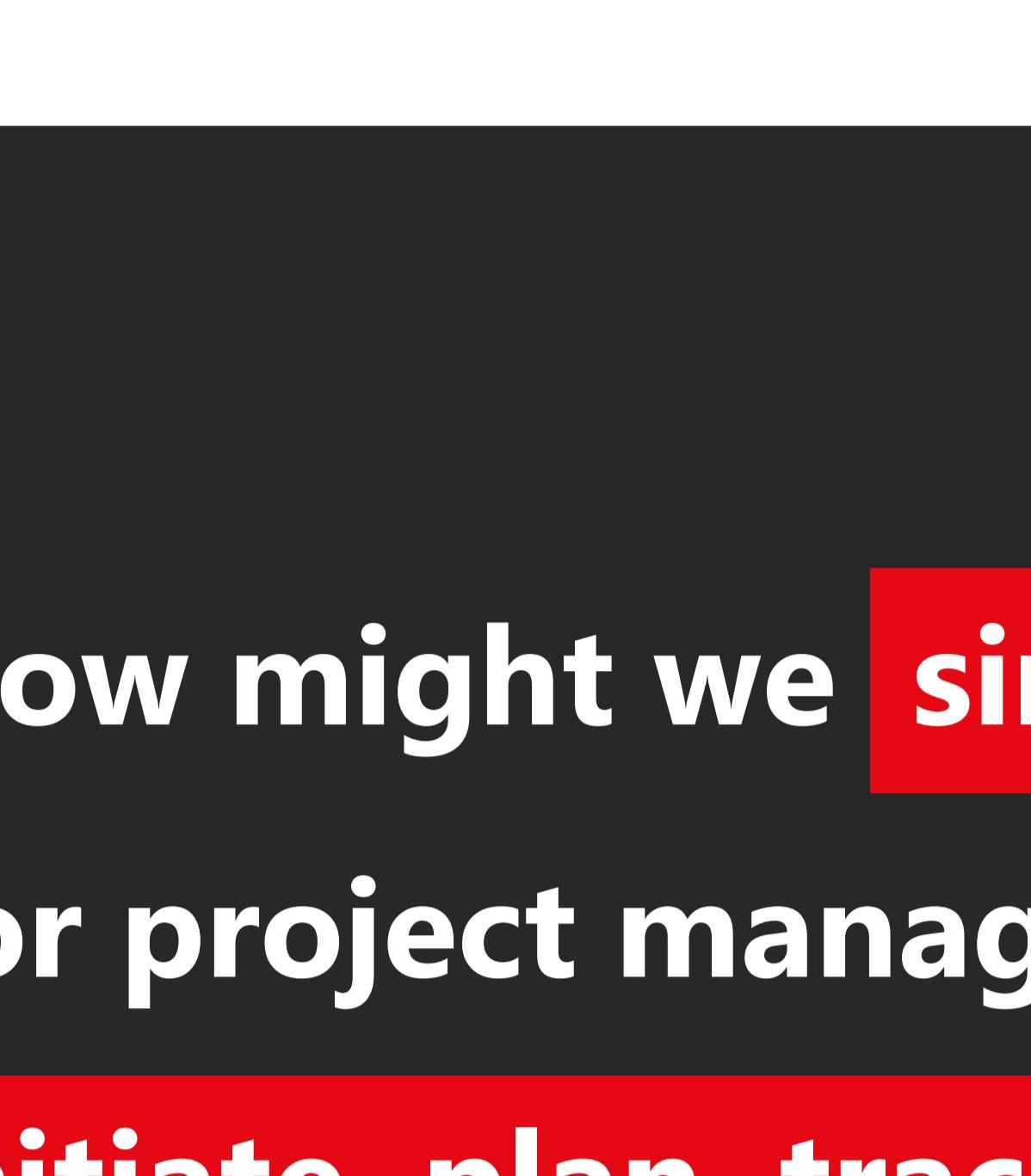


**JESSICA ROMAN**  
Each time both project managers and owners had to refer multiple documents to get a quick understanding of the project  
**#Project Manager**



**BRUCE ROGERS**  
Each time both project managers and owners had to refer multiple documents to get a quick understanding of the project  
**#Project Owner**

### Key Persona.



**JESSICA ROMAN**  
Project Manager  
*"We had a plan, we followed it, we delivered it; that's the right way to build trust with your clients"*  
Age: 38 Environment: Working from home

**Traits**

- Efficient and organized
- Outgoing and energetic

**Motivation**

- When the client is happy with the outcome
- Bringing a change and positive impact to business
- Being collaborative and working as a team

**Responsibilities**

- Attending meetings
- Interacting with clients, stakeholders and team members
- Create a project planner at the start
- Creating monthly reports and tracking deliveries
- Confirming the budget, resources, timeline for a project
- Address changes in the project

**Pain**

- Manually creating monthly reports
- Tracking the progress of bigger projects
- Miscommunication with too many people in a project
- Controlling changes and addressing them
- Tracking document transfers internally for big projects
- Using multiple applications at a time
- Manually calculating hours left and spent in project

**Needs**

- To have in-depth details of each task in a project
- To track the hours spent and hours left in a project
- To have an overview of all the projects on hand
- To track the progress of document transfer internally
- Proper planner when there are changes in projects
- Single application that does all the needs

In the middle of challenges lies an opportunity.

## How might we **simplify the workflow** for project managers **effectively** to **initiate, plan, track project** and **satisfy** their customers?

**USER JOURNEY MAP**

**Re-creating the crime scene**

With the research data we first drafted an as-is journey map to understand the users existing process. Later we started ideating and drafted a to-be journey to visualize the future state of the user while interacting with the product that includes our assumptions and ideas. This helped us in prioritizing opportunities to be accomplished upfront based on users emotions and pain points.

	ACTIONS	SCENARIO	EXPECTATIONS			
1	JESSICA ROMAN Project Manager	38 year old Jessica working as a project manager has received a new project from her PO and has been assigned the task of creating the project in system.	Ability to create the project successfully Information gathering about other projects Finding resources available quickly			
2	DAILY CHECK >	• Jessica has too many meetings as she checks her calendar • She checks the status of her projects on hand • She had received an email from her PO about a new project Testa as per yesterday's discussion	• Jessica analysis the budget and timelines of the project • She spends some time in analyzing the previous projects of the same client to check their expectations • She informs her PO regarding the revised timelines and resources needed	• She then creates a project in an existing tool • She also creates some main tasks under the same project code	• As only limited tasks can be created in existing tool, Jessica opens her spreadsheet and create some sub tasks • She also creates a timeline for the sub tasks created	• Jessica drops a message in her team group asking for the availability of people who can work on a new project • She also opens the spreadsheet to see members who are tagged in each project
3	THOUGHTS / EMOTIONS	"It is really time consuming to check what's happening in the project one by one" "Checking project details in different application, may tend to lose info"	"Clueless about the pros and cons of previous projects" "Frustrating to check the project reports separately one by one" "Finally happy to see the expectations of the client"	"Since it is the same client it will be great if I can replicate the same tasks from a similar project"	Frustrating to create same tasks once again "Manually entering dates by looking at the system calendar one by one" Excited that the plan is precise	Hoping about getting replies from the team members Frustrating to find out the resource information in different applications
4	OPPORTUNITIES	• An overview on all the projects on hand with its status • All the project details at one place and communication with one tool	• Data report automatically gets generated at the end of projects to analyze the pros and cons in the process	• A template for the main tasks once the project is created	• Integrate the existing tool with the product so that once the code is provided, all the tasks and info under that code appears in the product automatically	• An overview to check the availability of resources • User must be able to see the percentage of occupancy of individual resource quickly

### DEFINING MVP

#### Prioritizing opportunities by defining MVP

After continuous iterations of the journey map, we converted the pain points of the user to design opportunities. To build a minimal viable product in phase 1 we prioritized the opportunities that has to be focused first along with the project manager, project owner and the external stakeholders.

**MANAGING TASKS**

Breaking down the main tasks to sub tasks and sub sub tasks with specific information pertaining to each level of tasks.

**PROGRESS TRACKING/TIMELINES**

A gantt chart that helps the user to add timelines to specific tasks and set milestones to a project.

**PROJECTS DASHBOARD**

A quick overview of projects on hand helps users to plan their work accordingly.

**SPECIFIC PROJECT DETAIL**

A synopsis of every project that aligns all the stakeholders in a project on the same page and helps in month end discussions

### Technical priority

**INTEGRATE AN EXISTING TOOL**

Since project gets registered in an existing tool. All the information must be imported to our product with a project code.

**AUTOMATE ALL THE CALCULATIONS**

Calculations related to budget, hours, availability needs to be automated without any manual interventions

## ⚠ TESTED COVID-19 POSITIVE ⚠

My team members were tested positive including me. Business operations at many places were affected due to covid. The immersive and collaborative workflow in the project was impeded. Each member in the team had to wait for someone to execute their actions in the project. As stakeholders understood the situation, they were ready to accept the slow progress.

## Decreased momentum in the project

VALIDATING USER STORIES

### Quick works during tough times.

Since I was on a covid break, a junior designer was recruited in the project to validate the user stories as per the research insights, user journey map and decided MVP. The designer worked along with business analyst and project manager to sync all the research data with the user story and valid acceptance criteria.

User Story ID	Epic	As A	I Want to be able to	Acceptance Criteria
US-01	Dashboard	Project Manager	View the dashboard	1. User should be able to view the dashboard. The design should be as per the approved XD. 2. 4 tiles on the top should show the following information: a. Total Projects - All projects assigned to the logged in Project Manager b. Macconomy Budget - Budget allocated to the project manager as per Macconomy c. Working Budget - Working as per Macconomy d. Budget Spent - Budget spent as per Macconomy e. Currency of the budget should be default as per Macconomy
US-02	Dashboard	Project Manager	View all projects in the dashboard	2. Project Share tile should show a pie chart with ongoing, completed, yet to start and pending projects share and status and colors should be as per the design 3. Overview Tasks tile should show all the tasks which are due along with Project Name and Risk status as per the design 4. Upcoming Deadlines tile should show the deadlines from Macconomy along with the dates
US-03	Dashboard		Projects on Hand - Dashboard	5. All projects in use are responsible for are visible under projects on hand tile. The projects are seen as a list in which project name, Start date, working budget, budgeted hours and status is mentioned in the form of percentage.
US-04	Create Project	Project Manager	Add a project from Macconomy	6. User should be able to view a blue colored add a project button on the dashboard screen under all projects tile. Upon clicking this add project button user will be redirected to a screen where he should be able to enter a project code from economy turn up on entering the project code project description should be visible 7. User would be able to add only the Main Project from Macconomy. Any sub-project or CR project would be created from the tool itself

## 🔥 BACK WITH A BANG 🔥

My self and some of my team members recovered from covid and was back to work. We had to compensate all those non working hours by delivering the output as soon as possible. Additional designer, developer and business analyst were added in the project to gain momentum.

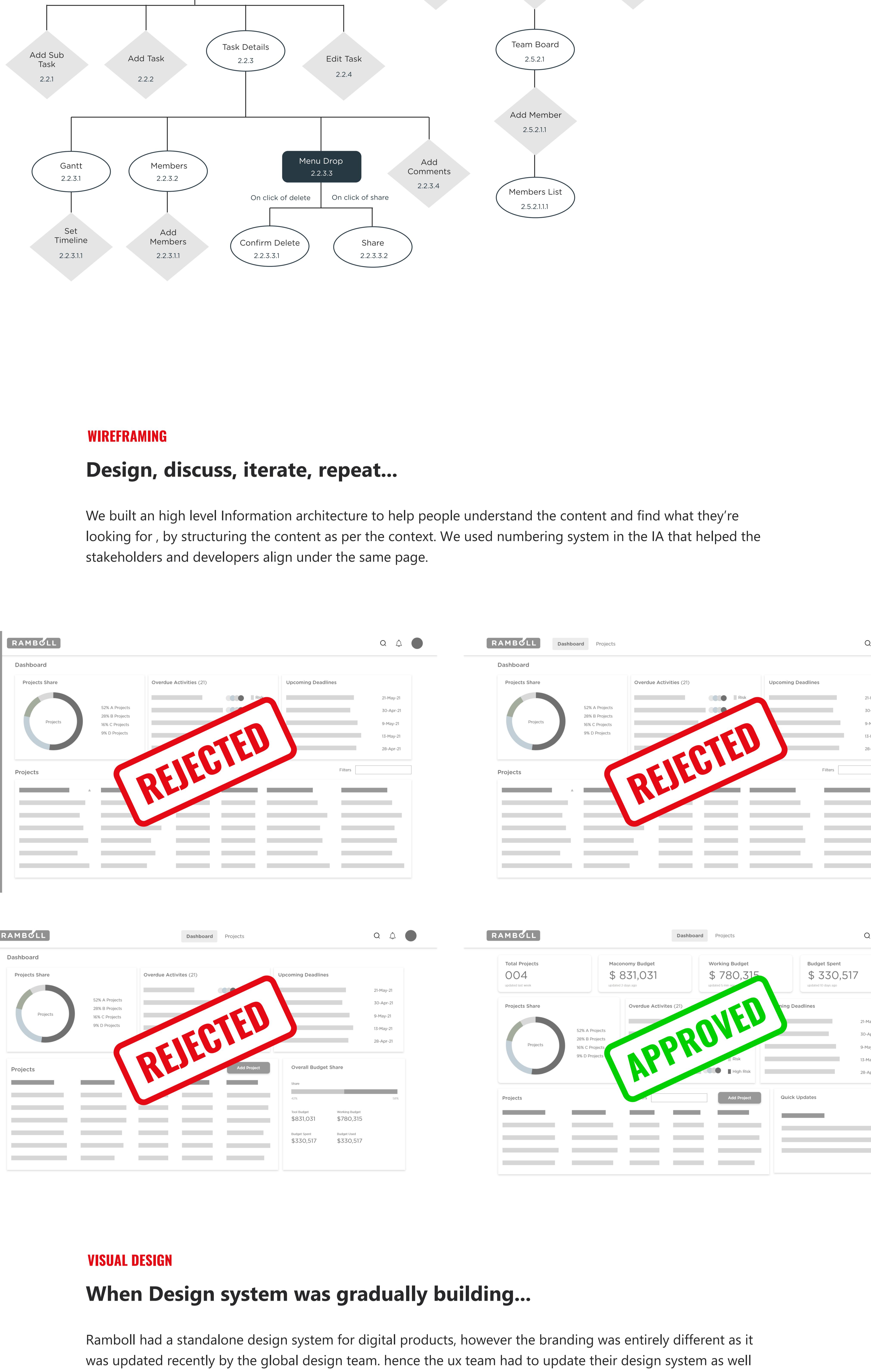
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graph LR; Start(( )) --> AddProject{Add Project}; AddProject -- 2.1 --> ProjectCard[On click of project]; ProjectCard --> TaskList[On click of overdue and upcoming tasks]; TaskList --> Synopsis[Synopsis]; TaskList --> Budget[Budget]; TaskList --> Members[Members]; TaskList --> Gantt[Gantt]; TaskList --> Calendar[Calendar]; Synopsis -- 2.3 --> AllOverview[All Project overview 5.1]; Budget -- 2.4 --> AllOverview; Members -- 2.5 --> AllOverview; Gantt -- 2.6 --> AllOverview; Calendar -- 2.7 --> AllOverview;
```

The diagram illustrates a workflow for managing projects. It begins with a central vertical column labeled "On click of project". At the top of this column is a rounded rectangle labeled "On click of overdue and upcoming tasks". From this point, five arrows branch out to five rounded rectangles at the bottom, each representing a different aspect of project management:

- Synopsis**: Labeled "Synopsis" and "2.3".
- Budget**: Labeled "Budget" and "2.4".
- Members**: Labeled "Members" and "2.5".
- Gantt**: Labeled "Gantt" and "2.6".
- Calendar**: Labeled "Calendar" and "2.7".

From the bottom of each of these five rounded rectangles, an arrow points up to a large rounded rectangle on the far right labeled "All Project overview 5.1". Additionally, there is a separate rounded rectangle on the left labeled "Add Project" with the number "2.1" below it, which has an arrow pointing down to the main vertical column.



RAMBOLL  
Welcome h

Ongoing Projects	
04	
updated last week	updated 2 days ago

Status	Count
Completed	05
Ongoing	04
Yet to start	02
On Hold	03

Calculate deterministic Calculations

REC - Aalto Alvarin kylpy...

Risk

Adding resource to activity

AaltoAlvari, peruskorjaus...

⚠️ High

Approving the budget

Hausia Jousenpuisto

⚠️ Risk

Update new maconomy code

Peruskoulu, Väinölä, RA...

⚠️ High

Projects On Hand

Project Name	Start Date	Budgeted hours	Working Budget	Progress
Project A	2021-04-28	100	100	100%
Project B	2021-05-05	150	150	100%
Project C	2021-05-12	200	200	100%
Project D	2021-05-19	250	250	100%
Project E	2021-05-26	300	300	100%

Add Project

Macconomy code integration

REC - Aalto Alvarin kylpy...

28-Apr-21

Adding Activity to ATR Form

AaltoAlvari, peruskorjaus...

30-Apr-21

Update the Work order

Hausia Jousenpuisto

9-May-21

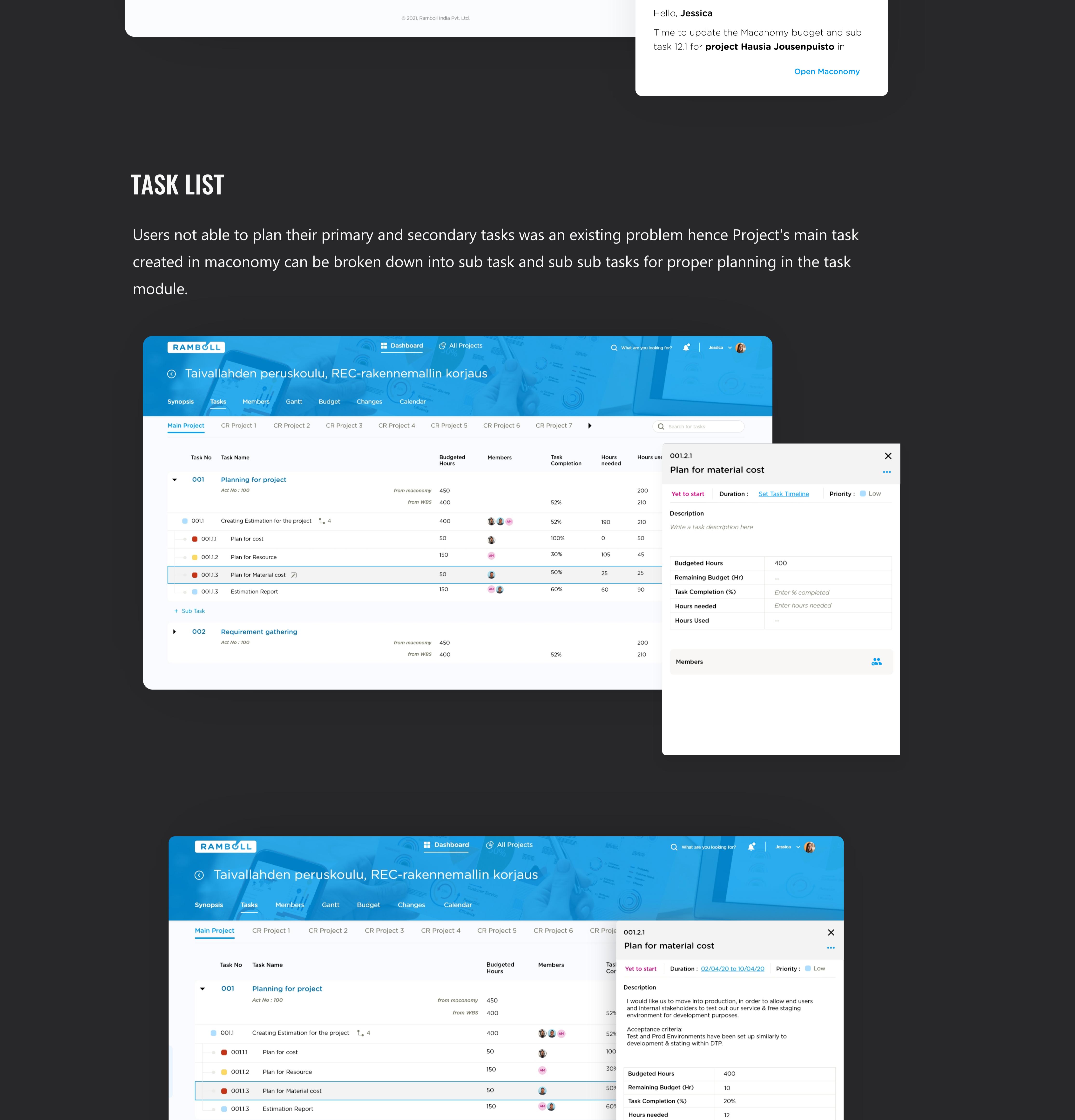
Update the Work order

Hausia Jousenpuisto

9-May-21

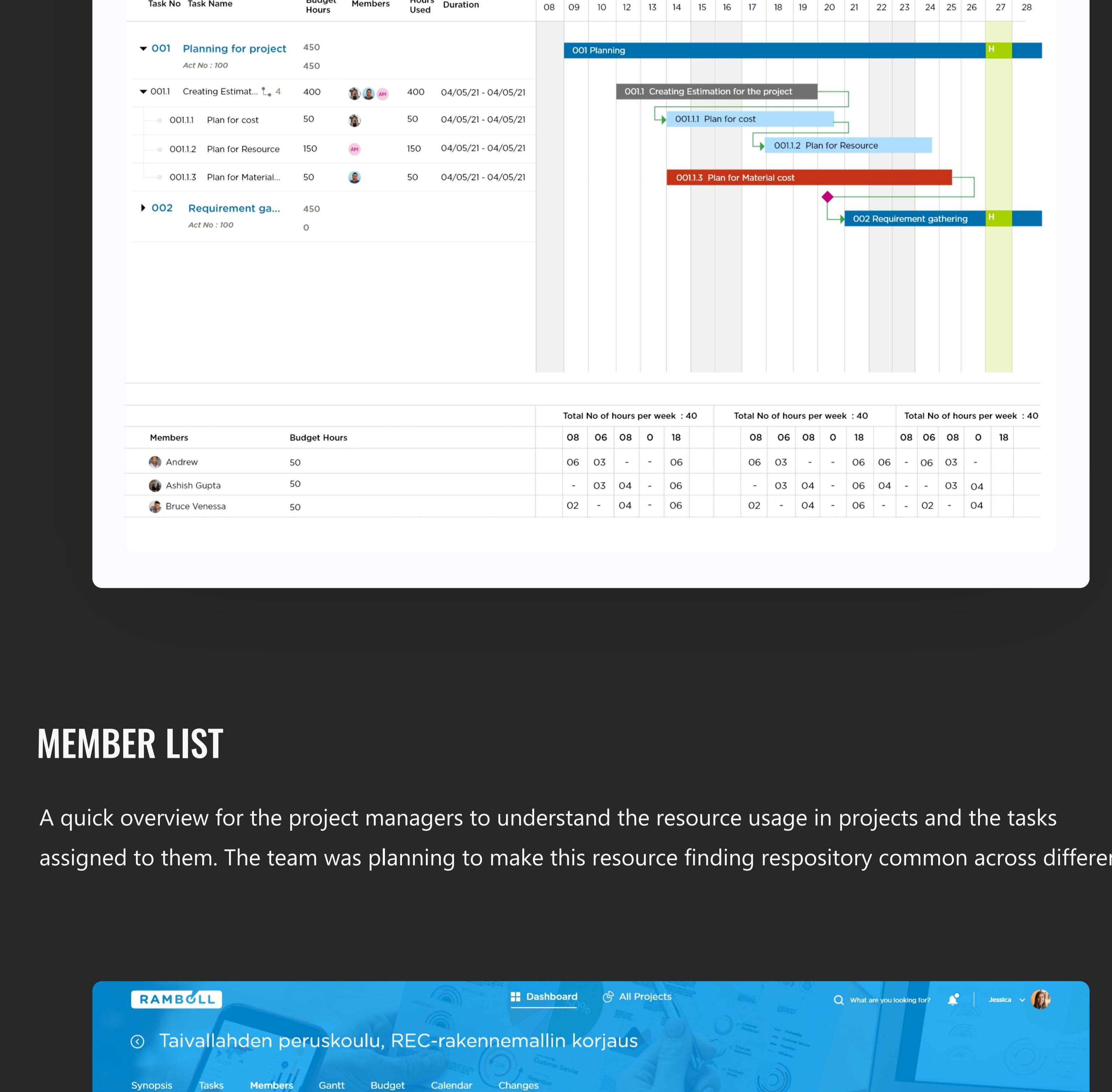
Updates

Updates



# GANNT CHART

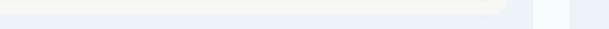
timelines and understand the completion rate at ease. We also explored some relatable plunging's along with the front end developers



A small circular profile picture of a man with short brown hair and glasses, wearing a green button-down shirt. The image is set against a white background with a thin blue border.

001.1.2 Plan for material cos... 25/40 hrs

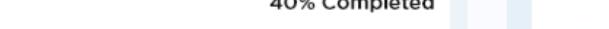
In progress End Date: 02/05/2020

 40% Completed

 Cathrine  
Full Stack Developer

Tasks: 2 Sub Projects: 2

In progress End Date: 02/05/2020

 40% Completed

 Alfred James  
Communications specialist

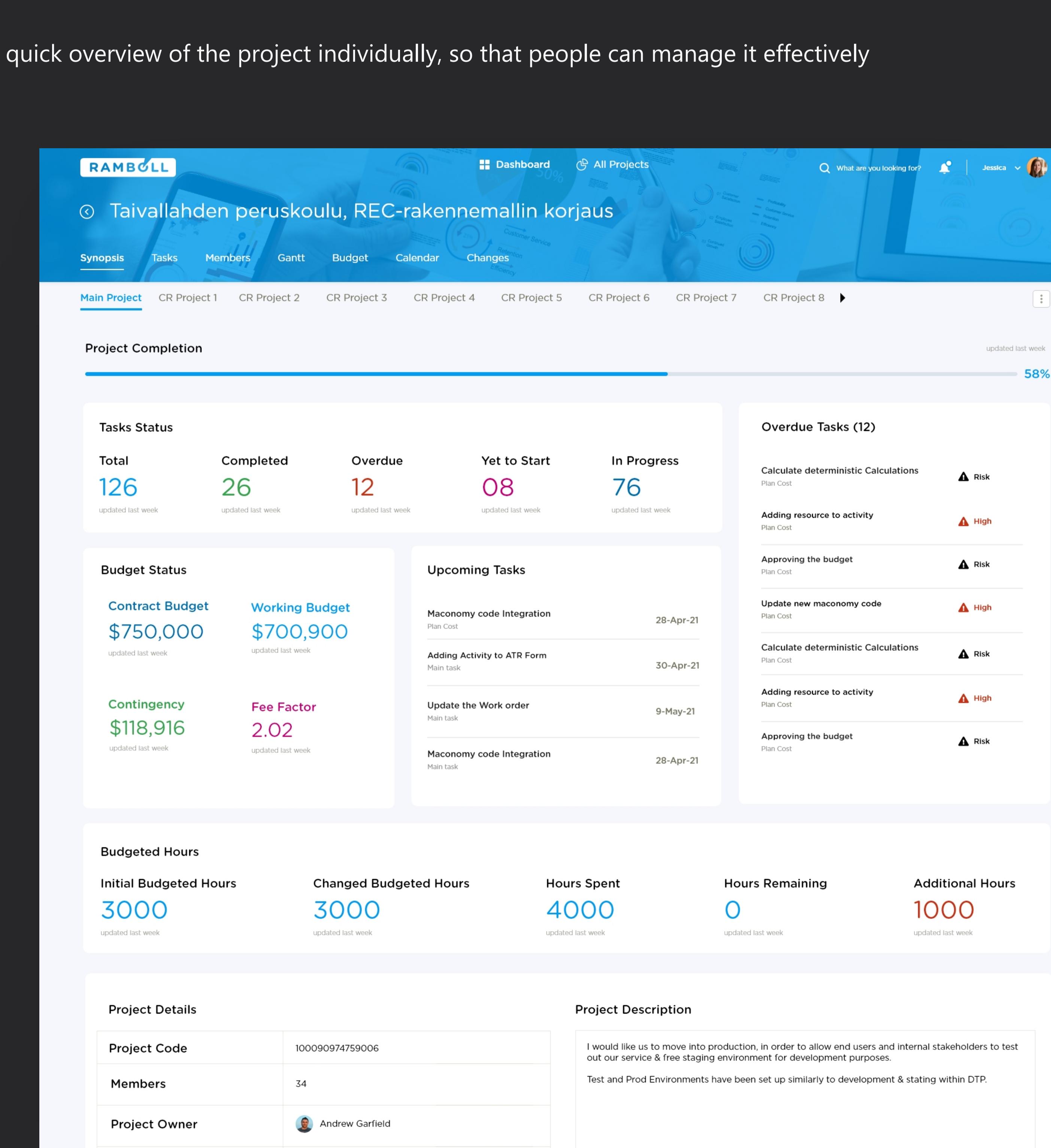
Tasks: 2 Sub Projects: 2

In progress End Date: 02/05/2020

 40% Completed

 Mark Wood  
Analyst

Tasks: 2 Sub Projects: 2



## VALIDATE

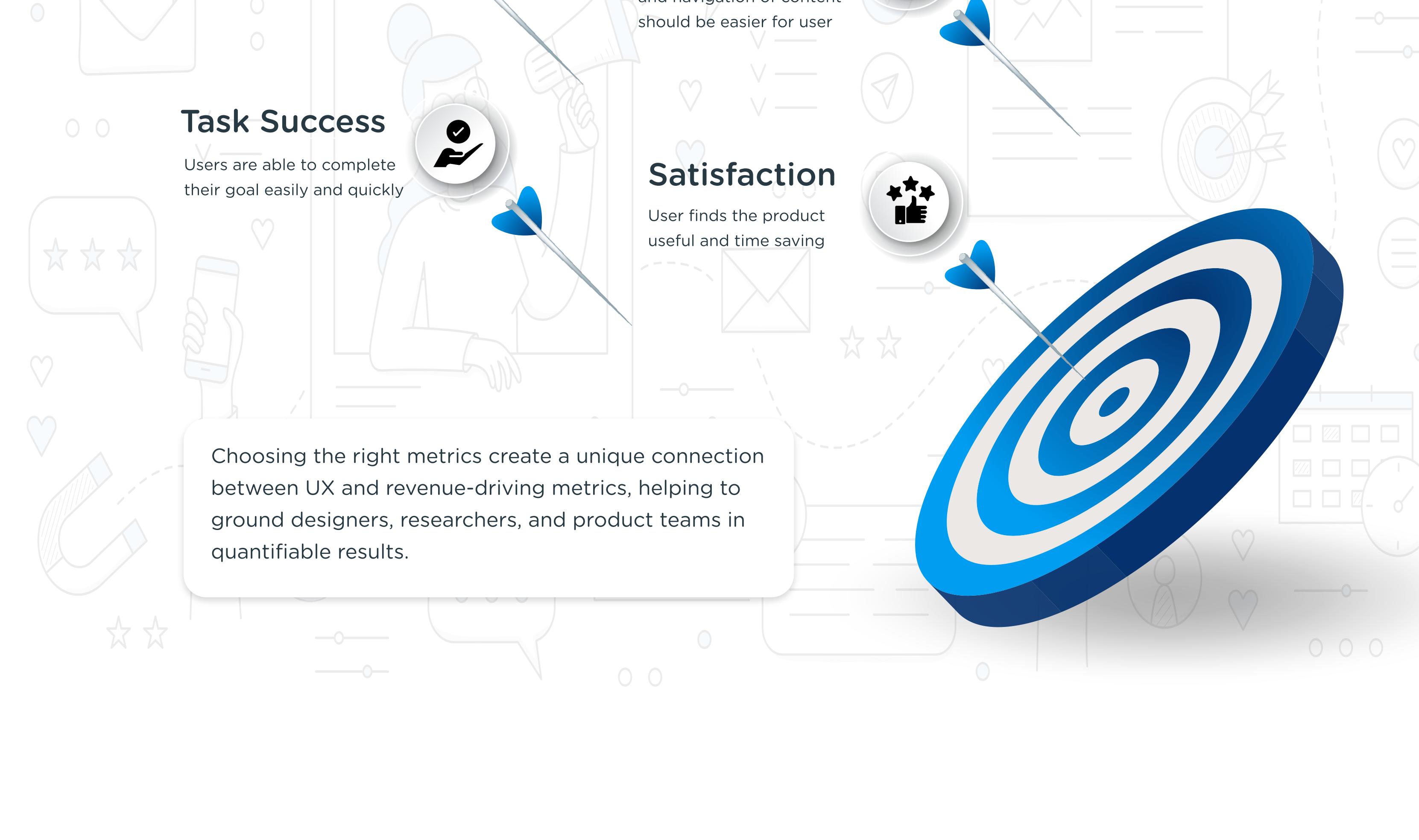
### USABILITY TESTING

#### When you think you're done.... you're not

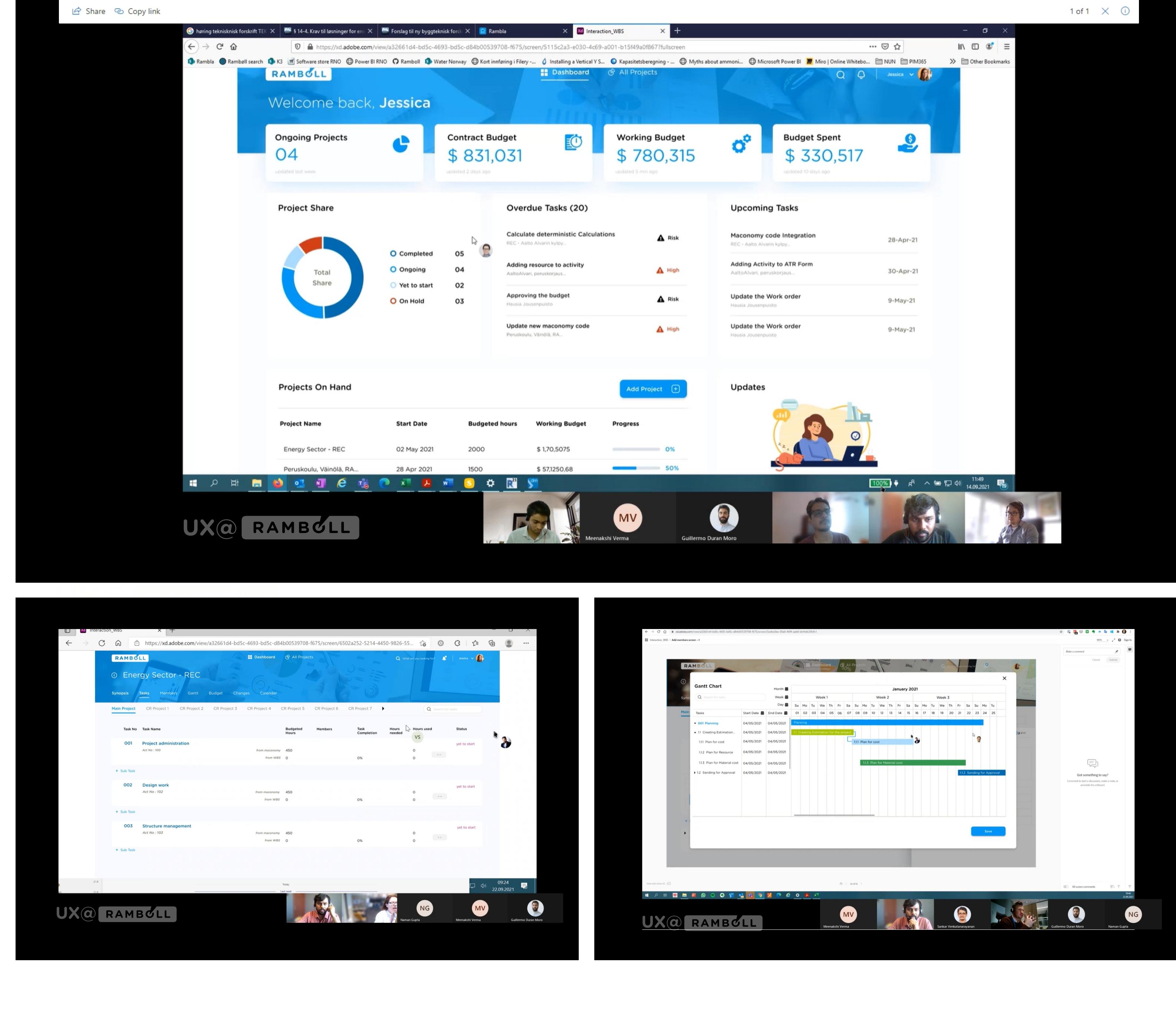
We conducted **remote usability testing** to evaluate our proposed solution by testing it with potential users. Testing was done with a prototype for specific tasks and feedbacks were recorded.

**"Real feedback from real users is priceless"**

We identified the right metrics to measure the outcome of our product which is highly important



We conducted remote usability testing with potential users for specific scenario's using teams and adobe xd prototype link. Data was recorded based on their behavior's, facial expressions, feedback, survey forms and ratings.



Users completing the task without any hesitation **90%**

Users satisfied with product's features and interface **88%**

Users find the product easy to use **94%**

Reducing user's manual intervention **82%**

### FEEDBACK

#### Business impact that we created

**"The breaking down structure in the WBS tool is useful now. I think, assigning Members to each sub task sub sub task, It's useful now"**

Senior Consultant HVAC and Energy

**"It's seems like an easy tool to use and easy to understand everything so it will be less time consuming than the old way with Excel and Maconomy."**

Senior Consultant HVAC and Energy

Hiding user details due to confidentiality