



About me

Projects

Case Study

Contact



FREELANCE UX & PRODUCT DESIGNER

[LinkedIn](#)

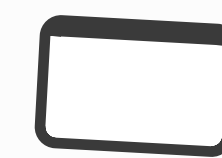
[CV](#)

Let's talk about your project ☕

I have 10+ years of experience designing & developing



Mobile Apps



Web Apps



eCommerce



and other stuff

for international clients and small businesses



I am also skilled at organizing and conducting **User Research**

User Interview

User Testing

Focus groups

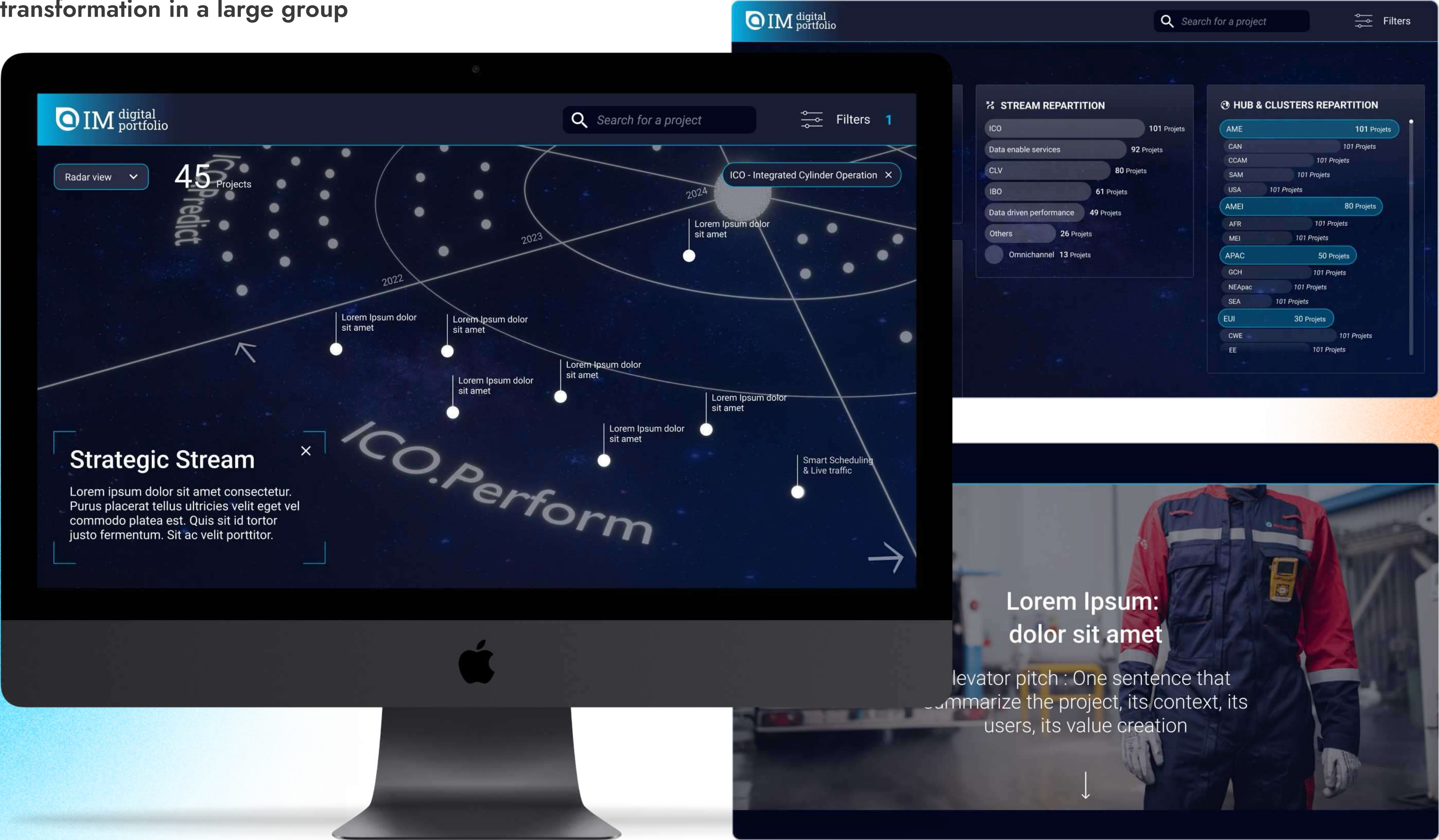
Workshops

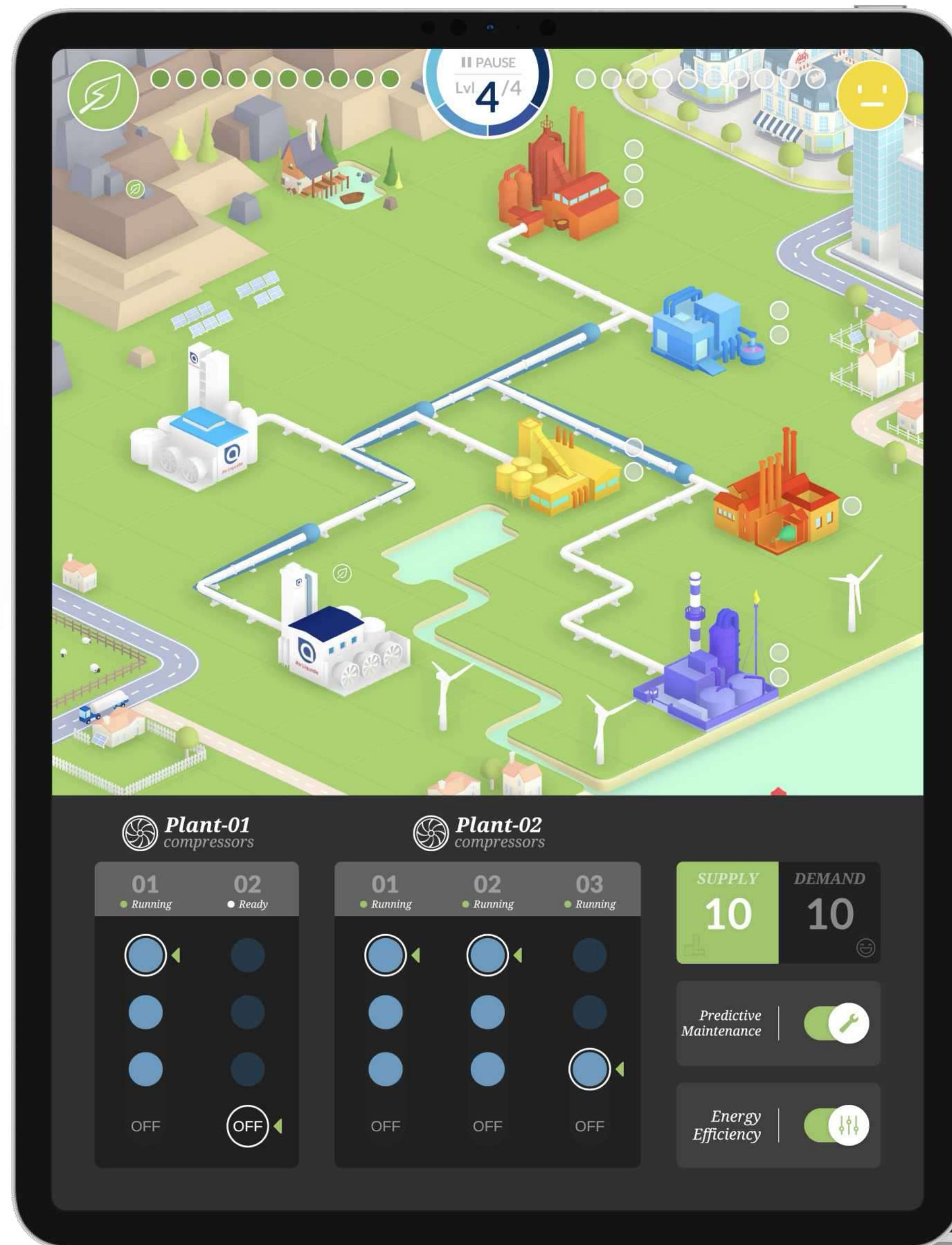


Some more of my work

Air Liquide Digital

Giving an overview of digital transformation in a large group





Air Liquide Communication

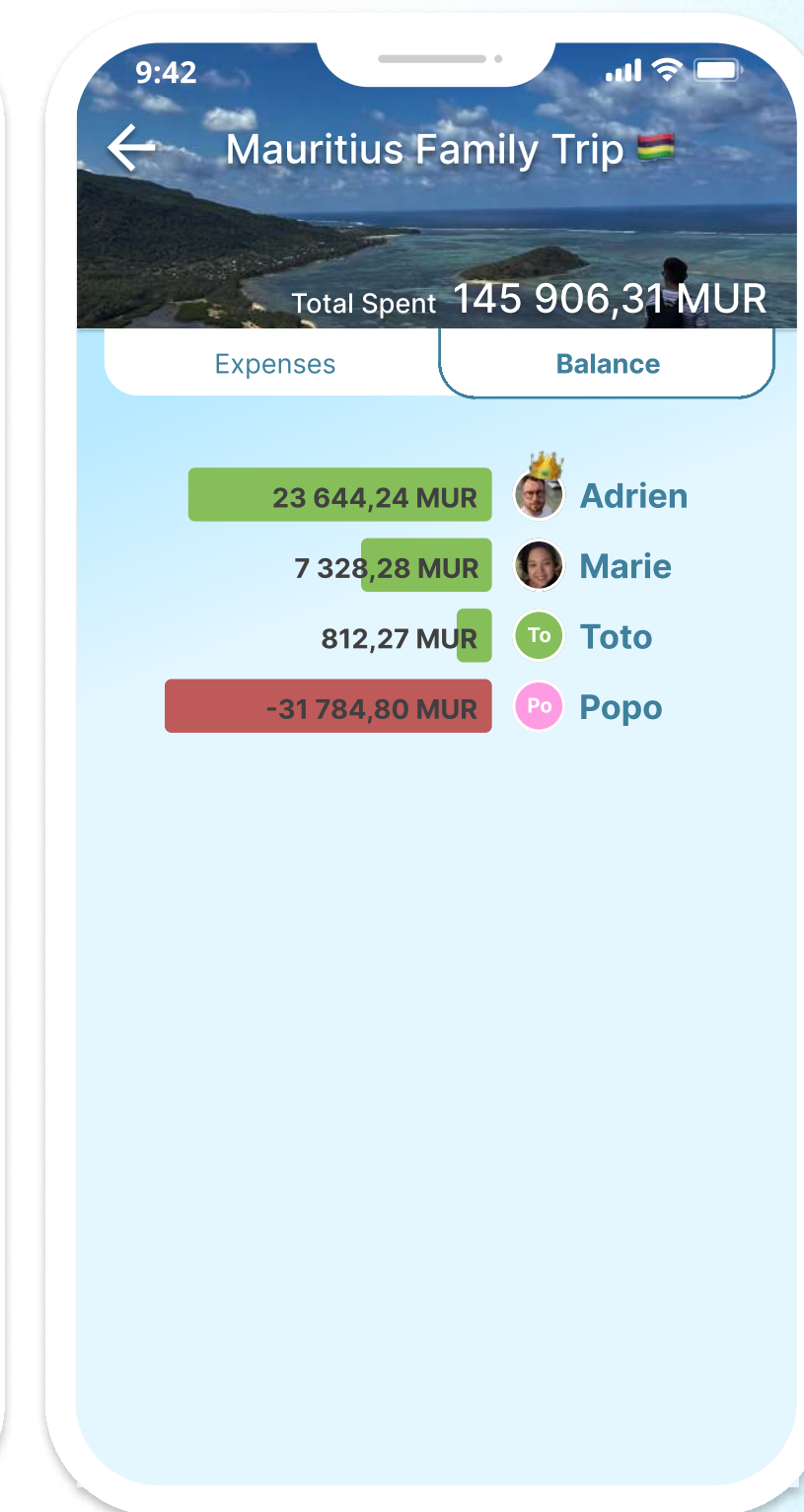
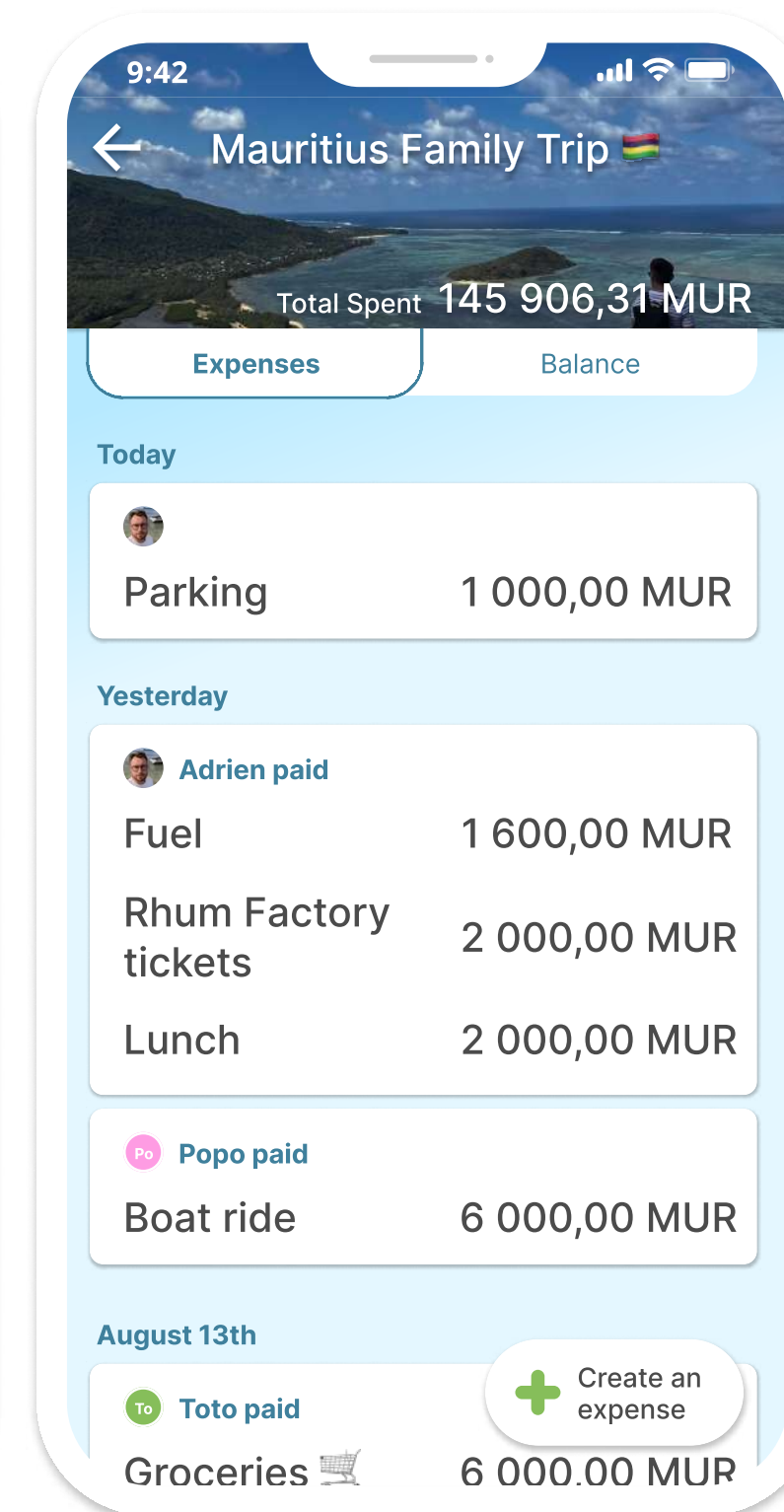
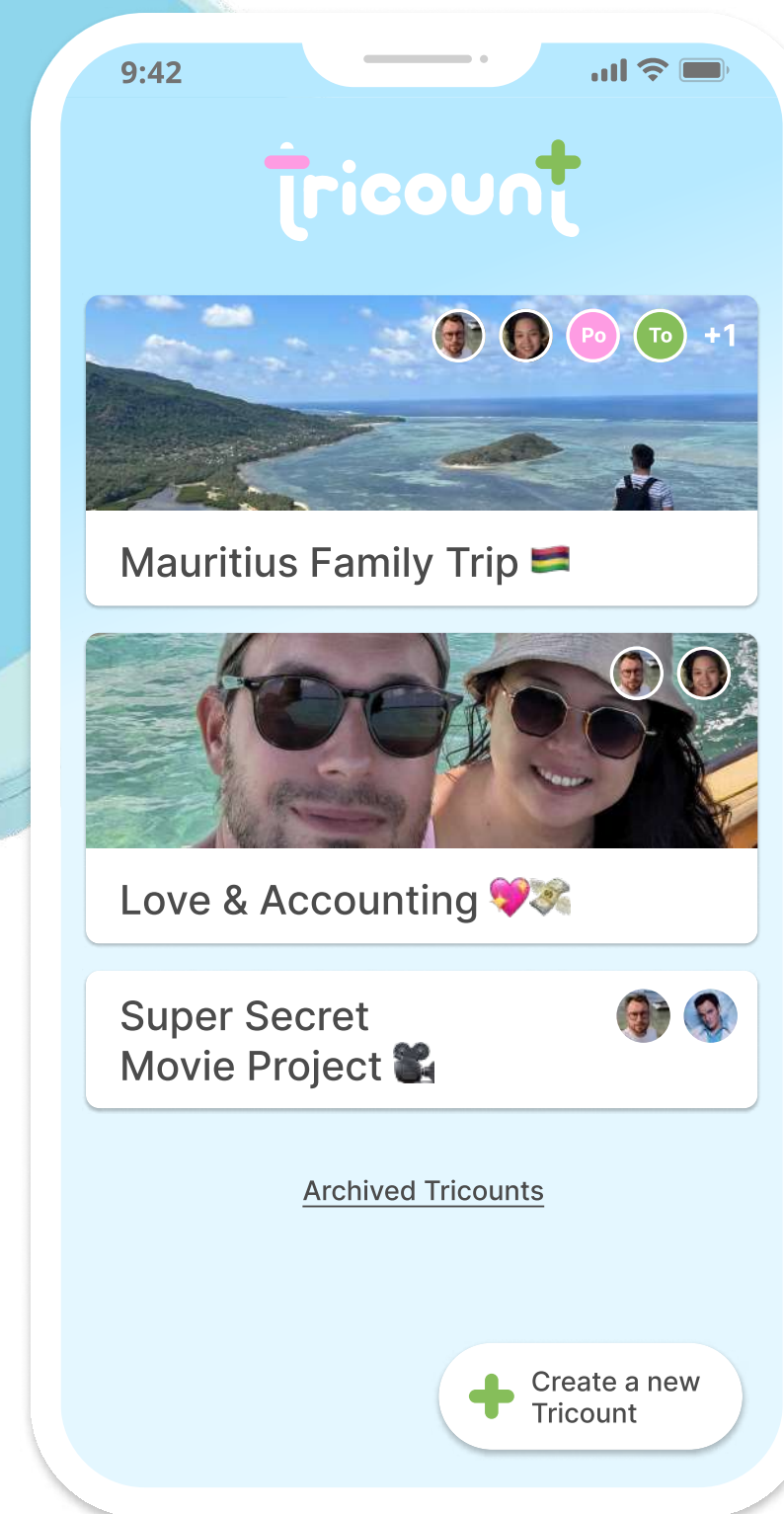
Introduce industry challenges to the public and new employees



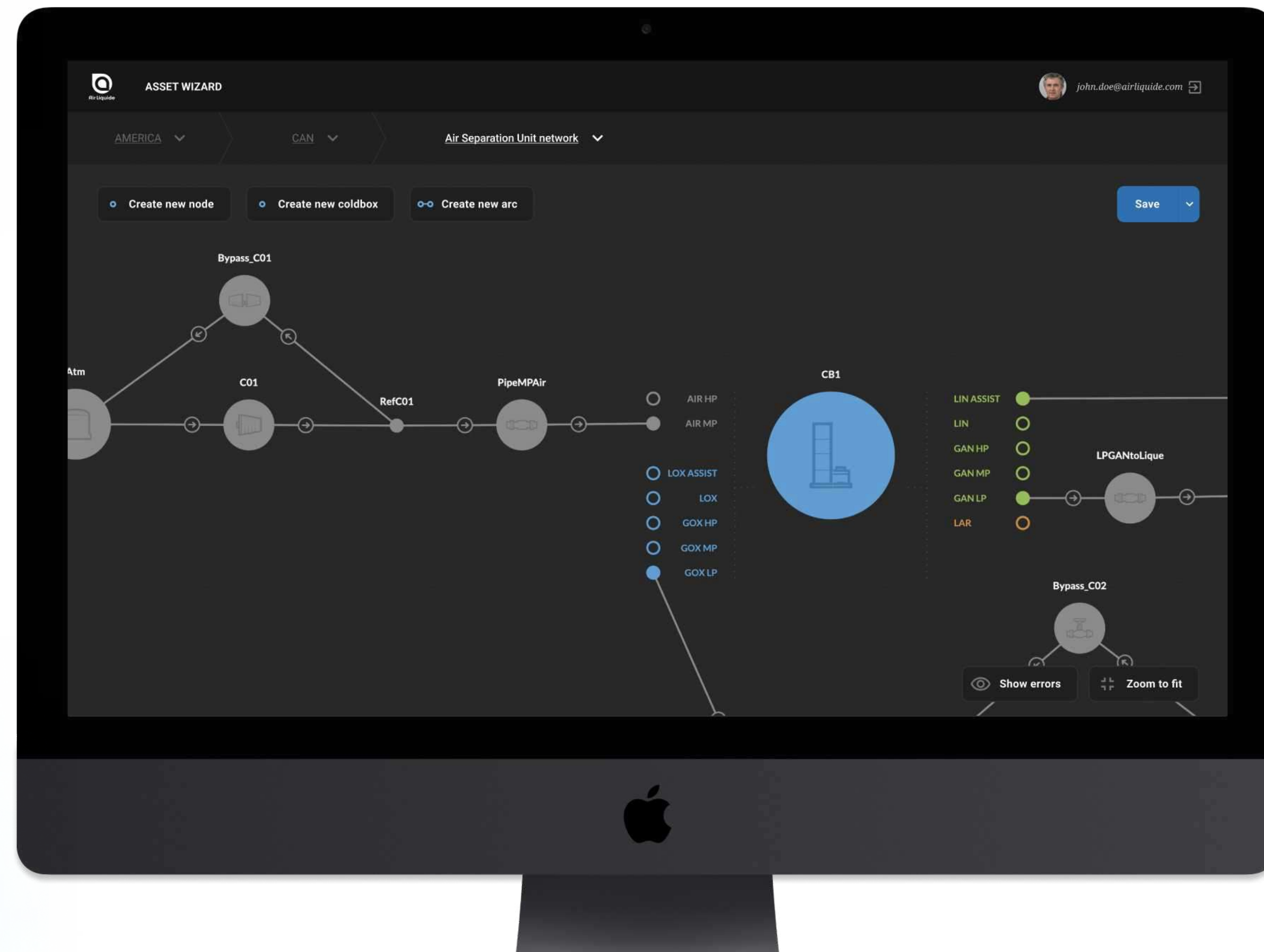


Personal project

Redesigning the Tricount app into a more family friendly experience



**Solve a Machine Learning optimiser
adoption problems by replacing complex
Excel files with an intuitive UI**





Starting Point

The R&D Data Science teams at Air Liquide have developed a Machine Learning model capable of simulating a digital twin of any gas production site and identifying its optimal production parameters.

With **hundreds** of production sites spread across more than 80 countries, this optimizer can generate a significant financial impact, amounting to hundreds of millions of euros.

But after a few training sessions in different countries, the project team has to draw a conclusion : **Users simply couldn't figure out how to use it.**

Results of the first training sessions

28

days to have
a working
parameter file

10%

of trainees succeed
in creating a
working file

Users and expert interviews

We selected about a dozen users (trainers, data scientists and trainees that failed to adopt the solution) to understand their experience using the tool.

The user interview format allows for the collection of broad insights through open-ended questions, while still maintaining control over the topics discussed.

“ Entering my plant’s parameters should be the easiest phase, because I know it perfectly. But I can’t seem to make it work. I had to draw a schematic of the plant beforehand and then carefully enter each node and arc in Excel ”

“ I get obscure mathematical errors, and I have to guess which parameters are causing them and what’s going wrong ”

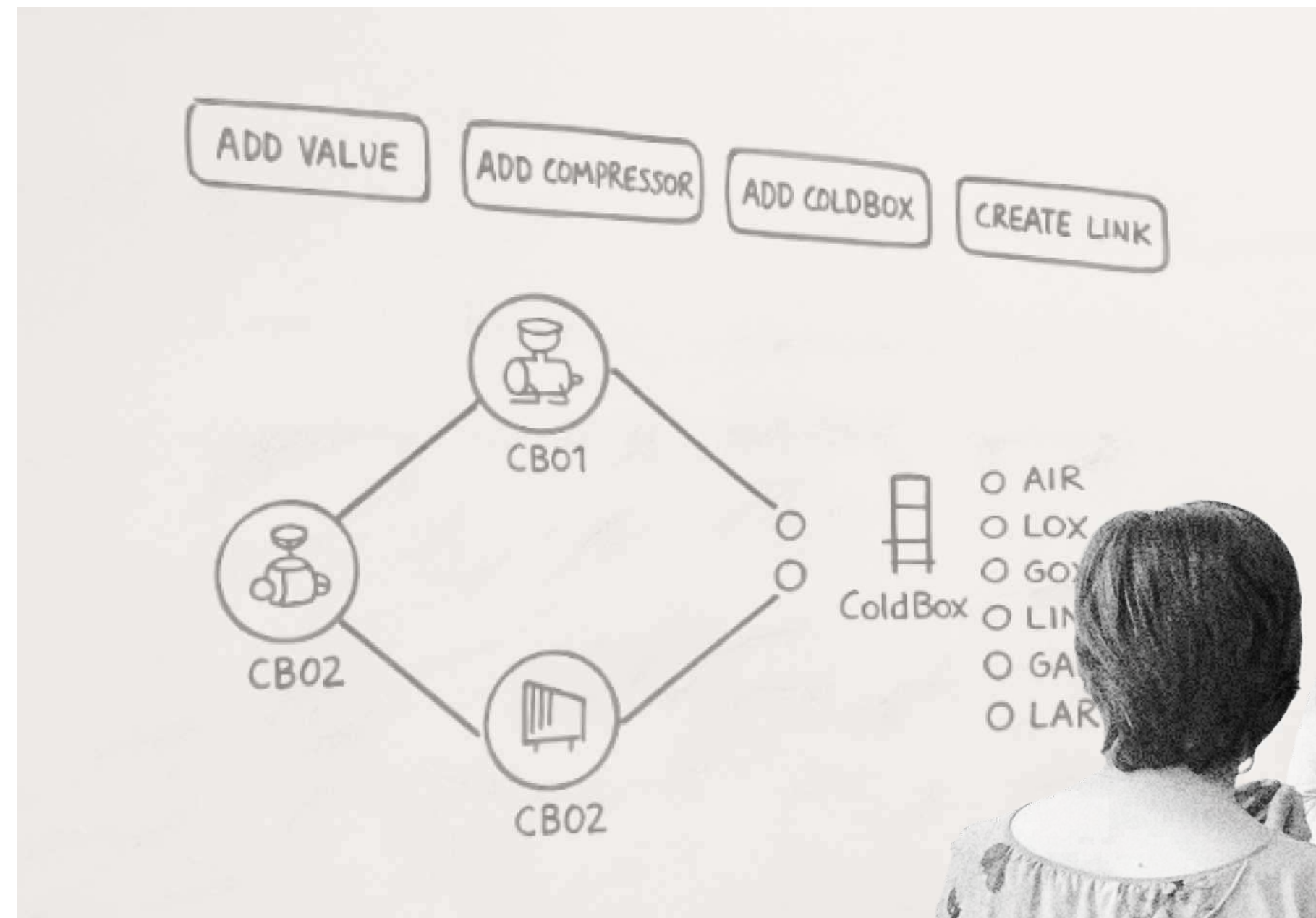
The insights were clear :

- Entering the **plant structure in Excel is not adapted**, and very error-prone
- Entering data in Excel **doesn’t provide any guidance or warning**, the only output comes from the model. And it is not self-explanatory.



Co-creation workshop

I facilitated a co-design workshops with data scientists, experts, and users to define possible solutions and gather some feature requests.



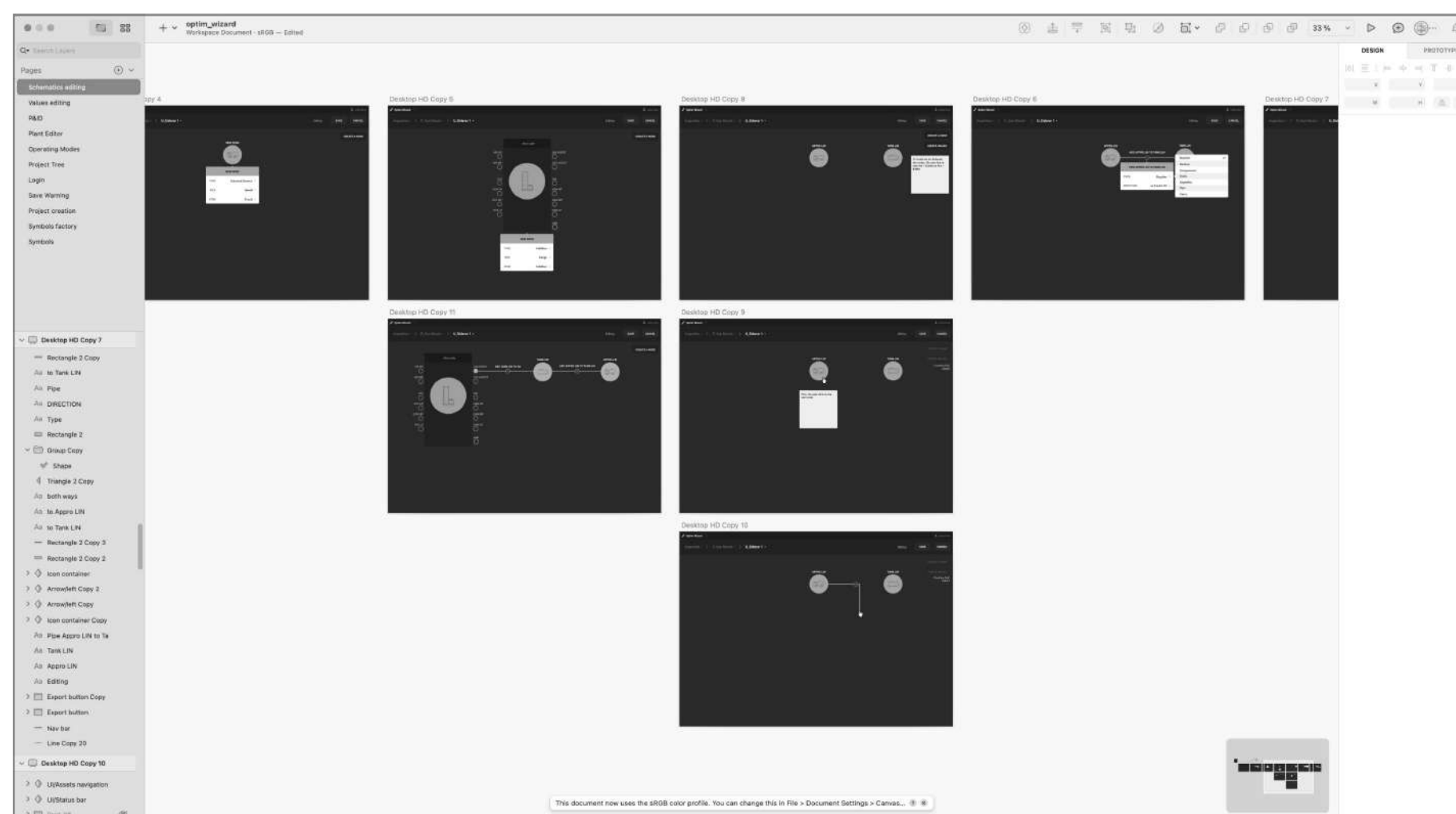
A potential solution emerges from the diagrams that users sketch out before entering the data.



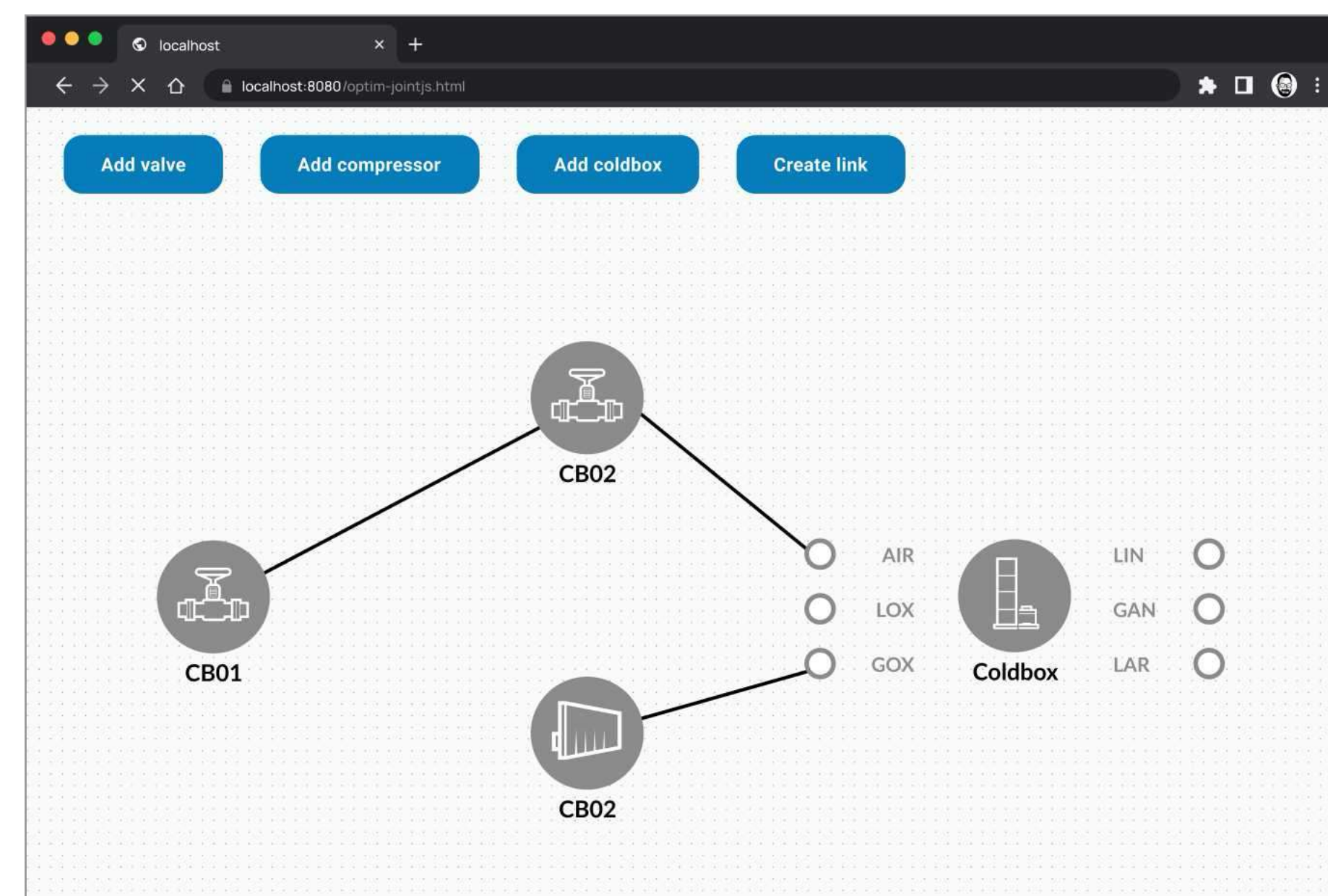
Prototyping

Based on the insights gained from the user interviews and the features proposed in the workshop. I wireframed a solution where **users simply place nodes on a canvas and link them together** according to their plant configuration.

Since this kind of software is not widespread, I looked for potential technical solutions to achieve this result. I ended up **creating a working prototype with the Joint.js library**. This prototype effectively demonstrated the project's feasibility to both business owners and developers.



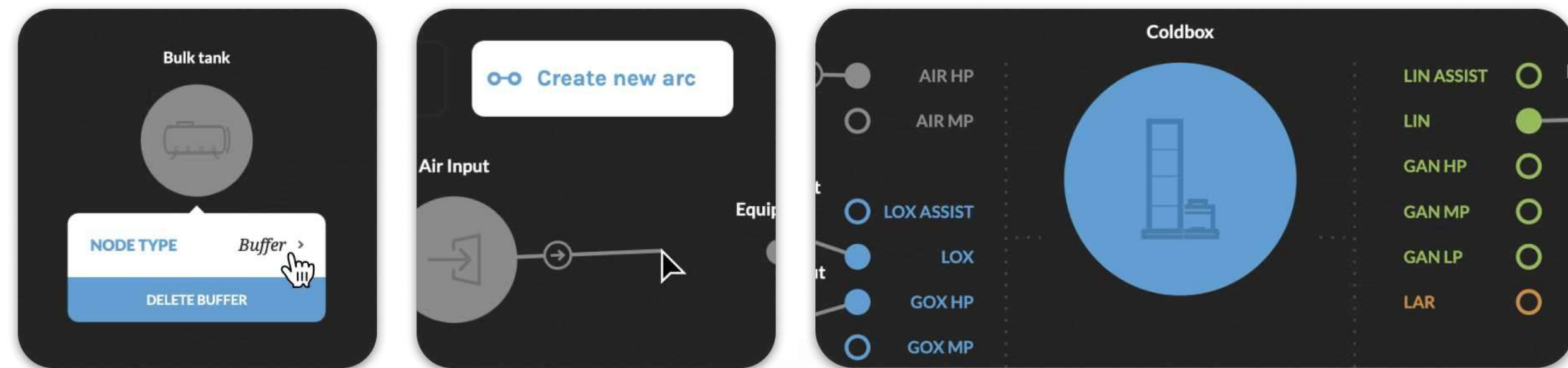
Low fidelity wireframes representing the interactions needed to create industrial plants schematics



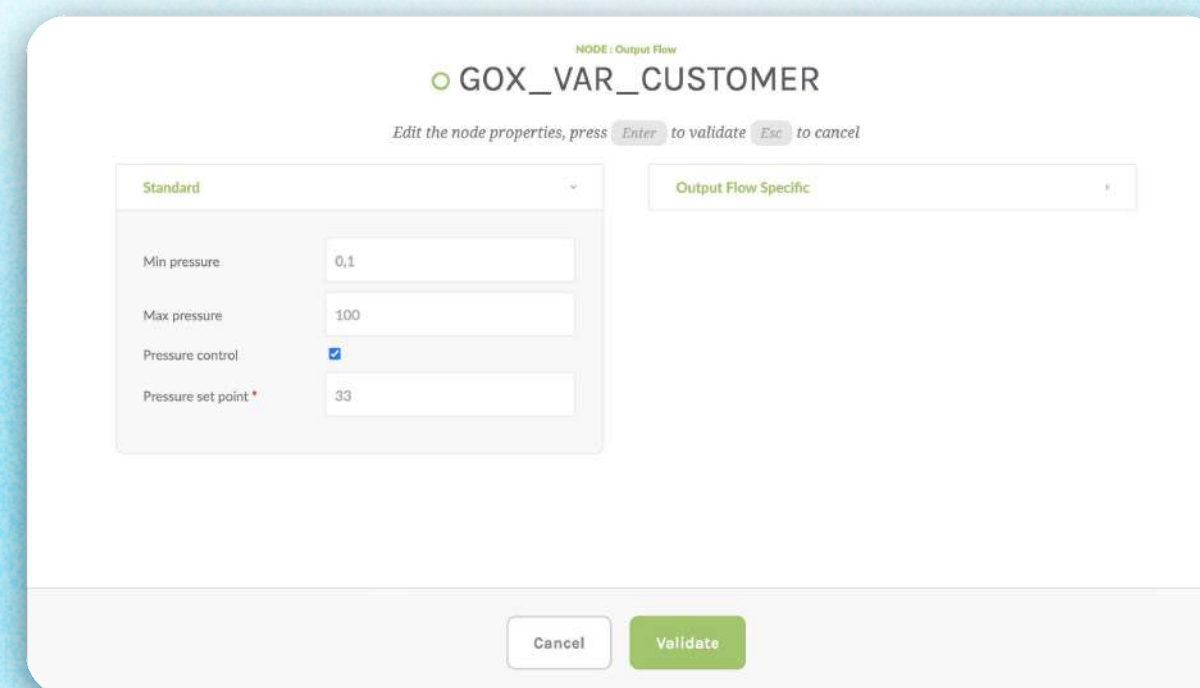
The Proof-of-concept prototype only featured the basic interactions, but it proved that the envisioned solution was feasible

Designing a user-friendly interface to enter complex data

Since users will spend hours creating their plant schematics and entering data, I orient the design towards dark-mode. It also matched existing control rooms screens design.



To make the diagram creation as easy as possible, I focused my work on micro-interactions.

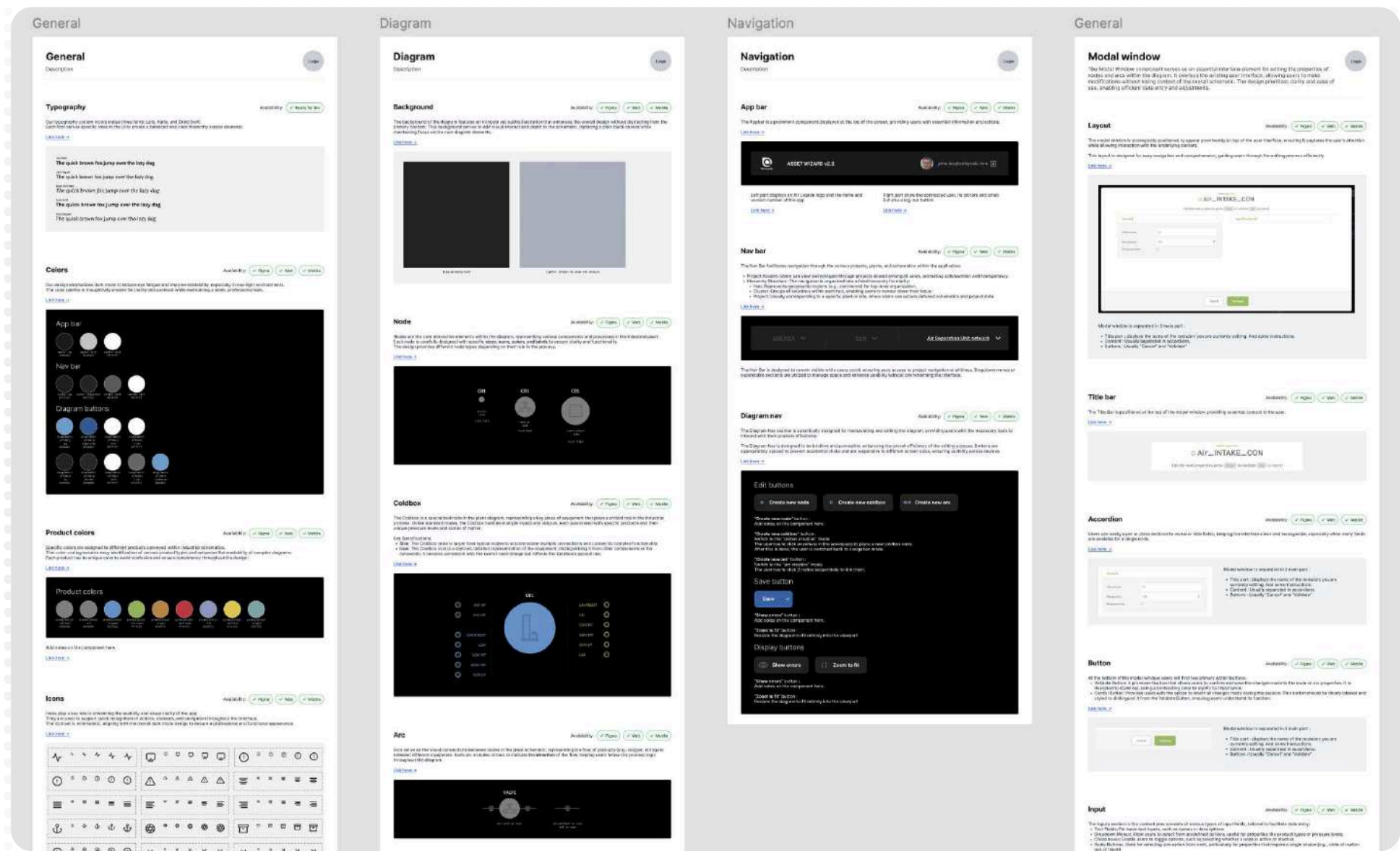


The technical data entry for each node is accessible in a dedicated modal window. The user focuses on entering the specifications of one piece of equipment at a time.

Collaboration with development teams

Throughout the development, my occasional involvement helps explore solutions to feasibility issues (such as testing JS frameworks for the diagram).

I organize regular **Developer Reviews** to gather technical feedback from developers on the design of new features.



The mockups are accompanied by **documentation** that names, describes, and specifies each component.

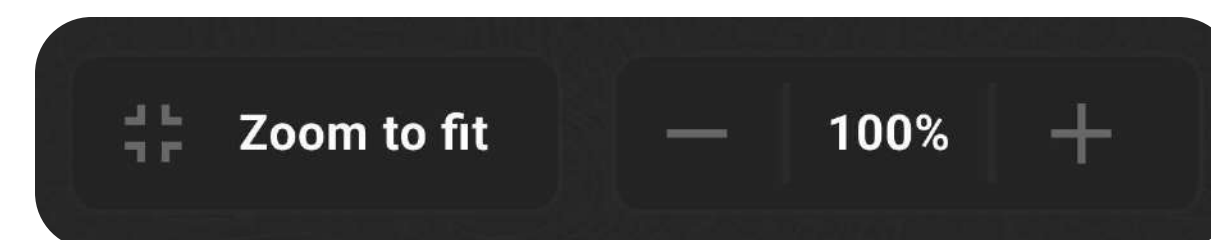
It also includes code detailing the technical specifications in a developer-friendly format.

User Testing

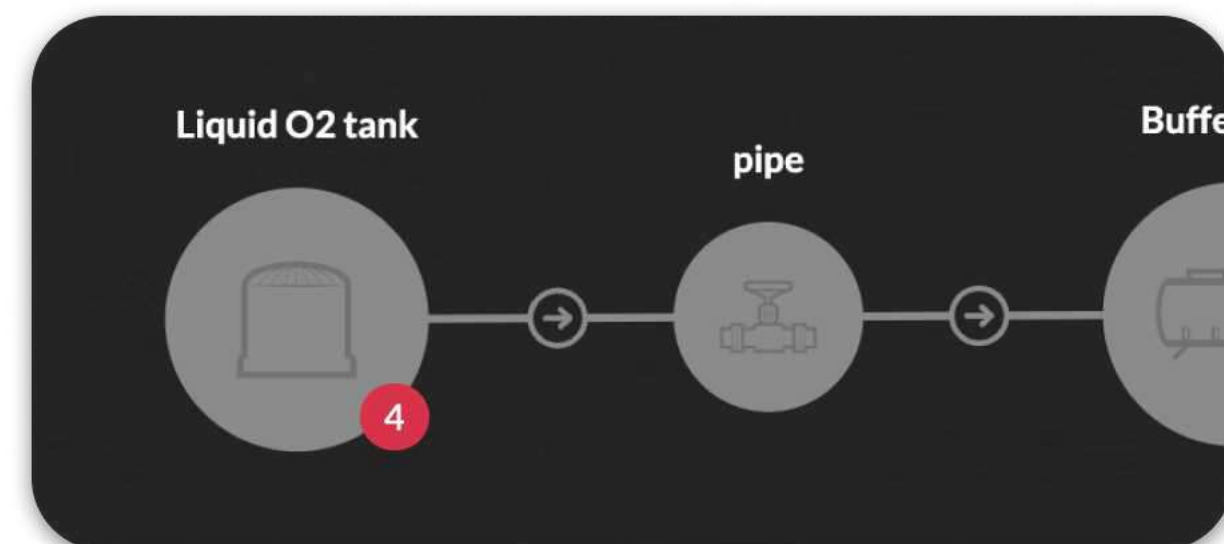
User testing helps **identify blockers and friction points** in a digital interface by placing it in the hands of the user.

For this project, we conducted two rounds of remote testing with around twenty users across six countries (France, Germany, Benelux, Singapore, China, Canada).

The results confirmed the tool's ease of use and highlighted a few friction points and quality-of-life improvements. They were fixed and included in the final development sprint.



After creating their plant diagram, users would play the scroll-wheel to get a complete overview of the diagram. A button was added to make this task easier.



In the diagram view, we added some badges that inform on missing fields. This also gave a global overview of the remaining effort until completion.



Project Impact

days before first working version

~~28~~ → 4

Training success rate

~~10%~~ → 90%

Solution deployment

150

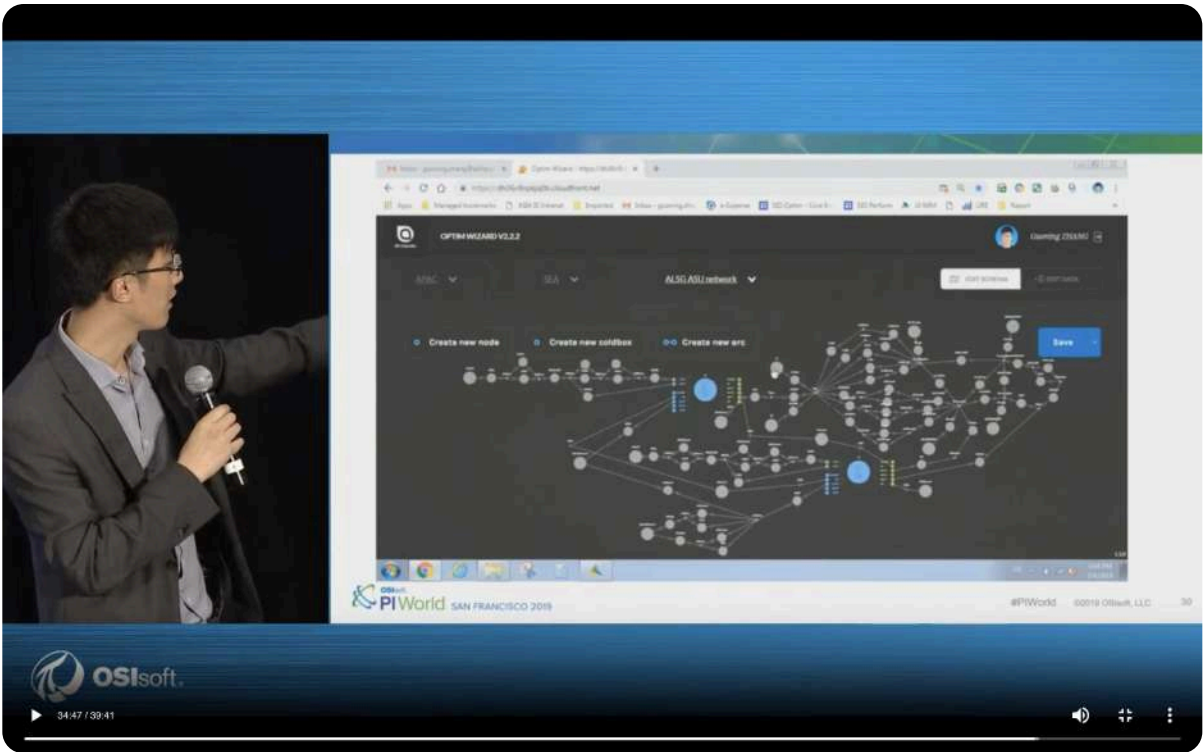
industrial sites

23

countries

The solution adoption problems were clearly fixed by this project, and allowed the company to improve operation efficiency in 23 countries.

The diagram format was so well received that some plant managers printed and displayed it in their offices.



In 2019, the solution was featured in Aveva’s PI World conference to illustrate Air Liquide efforts to optimize its operations thanks to data

In 2020, I was contacted to design the same type of UI for another project, this time the new tool would be used to parameter and visualize realtime on-site sensors.