Ideate: Disney Method

Our team selected the Disney Method for the ideation phase of our theory because it enables us to creatively generate a wide array of ideas and systematically deconstruct them into manageable problems to find solutions. The Walt Disney Method separates the process into three different phases, the dreamer, the realist and the critic. Each stage has been assigned to a different color, starting with the dreamer:

The Dreamer

The dreamer has unlimited resources and imagines a perfect scenario in which all things work out without fail.

Fully automated or manually triggered software Perfect weather forecasts with timing of when it becomes too cold for blossoms and when it gets warm enough again

Dense sensor network to obtain comprehensive data (Heatmap) Equip each tree with a health chip to make detection more accurate The sensors function forever without maintenance

The farmer always receives his data on time and no blossoms are lost

The Realist

As we get into the realist part, the definitions become clear and visibly split into several different smaller issues to tackle.

Visualization software for a dashboard that displays the weather and marks critical time points

Solar panels that reduce electricity costs and extend battery life in the fields Minimize water damage and corrosion through resistant packaging Separated stream of data for current weather conditions and forecast

Connector to all available weather stations + weather forecasts Divide the farmer's fields into sectors and only irrigate in critical sectors

Optimize Hardware choices

Recruit experts capable of implementing the system. Securing sufficient funding to make the solution feasible

Sensors that cover all trees with sufficient spacing Receive reliable data in short intervals without interruption

The Critic

In the third stage of the Disney Method, the Critic phase involves a thorough examination of potential issues, pointing out the most important ones.

Weather (rain, wind) disrupts sensors

Access to reliable weather data can become costly

Water damages hardware, causing rusting and corrosion Little scalability for the system outside of apple farms

Valves can rust and freeze up during rapid frost events Total Budget below 2000€

Maintenance and warranty are laborintensive