



open**SAP**

TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

ANTI-HAIL CANNON AUTOMATION

Story

Unpredictable atmospheric agents such as hail cause a loss of millions of euro every year, and it's even worse now that the weather is rapidly changing due to global warming. Companies like Melinda (an Italian apples producer company) have heavily suffered in the last years due to this atmospheric problem.

A solution to the hail problem is the use of anti-hail cannons, that create an explosion of acetylene gas, nitrogen and oxygen, creating a shockwave strong enough to mix up the polarities in the clouds and therefore, preventing the creation of hail. But we still need a technician that oversees the activation of the cannon, but it's not as easy if one must monitor multiple crops in different locations.

With IoT, it's possible to have an instant monitoring of the atmospheric condition of every crop field and to activate the cannon firing remotely – or better, automatically.



Alexander

Technical Specialist

“I make things work efficiently, giving maintenance to the machines and activating them when needed”

About

- 32, married, 5 years technical experience.
- Getting things done and seeing them work is what makes me love my job
- I am constantly moving from facility to facility checking that everything is working as it should be

Responsibilities

- I am responsible for the correct functioning of the anti-hail cannons
- I am responsible for the activation of the anti-hail cannons when most needed
- I spend most of my time bouncing from the different facilities of the company

Needs

- I need to know the meteorological conditions of every single crop
- I need to be able to activate the machines at the right moment, before the hail starts to fall

Main Goals

- Optimization, monitoring and effective activation of the anti-hail equipment at my company

Pain Points

- Constantly moving from a place to the other is a tedious task
- Can't be on two places at the same time if two machines need to be activated at the same time

Point of View





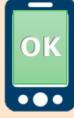



As a Technical Specialist

I need a way to be able to monitor the weather conditions of each crop so that I can activate the cannons.

As a Technical Specialist

I need a way to activate the machines when needed so that they can save the crops from being destroyed.

UX Experience Journal

ACTIONS	See crops status 	Identify critical crops 	Activate cannons or, if automated, check correct activation of cannons  	Check effectiveness of cannons 	Go on with regular job
MINDSET	"Let's see if any of my crops are in danger / Just received a notification"	"Oh god, there are 3 crops that are at risk"	"Let's activate the cannons" / "Are the cannons ready and working?"	"Yes! The cannons are doing their job just fine"	"Great, let's focus then on the maintenance of this other machine..."
FEELING					
TOUCH POINTS	Cellphone	Cellphone	Cellphone	Cellphone	

MOCKUP

<https://standard.build.me/prototype-editors/api/public/v1/snapshots/f6513a1ba6dc0c9c0e13d34c/artifacts/latest/index.html>