

Managing high-tech equipment in agriculture

Problem statement

Throughout the stakeholders' events and focus group interviews carried out in the WeLASER project so far, the participants raised many concerns related to the use of high-tech equipment in agriculture, which requires new knowledge and technological concepts (communications, robotics, IT systems, etc.) to be managed and configured, and strongly depends on the internet availability. Moreover, the users are required to exhibit advanced skills related to computer-based systems (operating systems, WIFI, etc.), and to dedicate too much time to keep the software up-to-date.

User requirements

Therefore, the users of agriculture machinery demand systems capable of being used in a friendly way (self-explained commands on portable terminals), not requiring additional concepts beyond common agricultural knowledge (simple agricultural jargon) and communicating with other systems robustly.

Practical solution

WeLASER is facing these users' concerns using cloud computing technologies based on Internet tools and web-based interfaces. With this solution, WeLASER will provide a human-machine interface capable of



- Commanding simple, powerful directives such as “GO TO FIELD <name> AND APPLY PROCEDURE <weeding 1 | weeding 2 |>”.
- Providing versatility and independence from specific machinery commercial brands. It can be run on any type of terminal (Phone, tablet, laptop, etc.), Being robust in communicating with the cloud via 4G and 5G communication. This will avoid many problems derived from the use of routers and the limited WIFI coverages.
- Using the facilities and language provided by the Internet to which people are getting more and more familiar.
- Not requiring software updates (done by the provider of the service).

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