

SoilMate

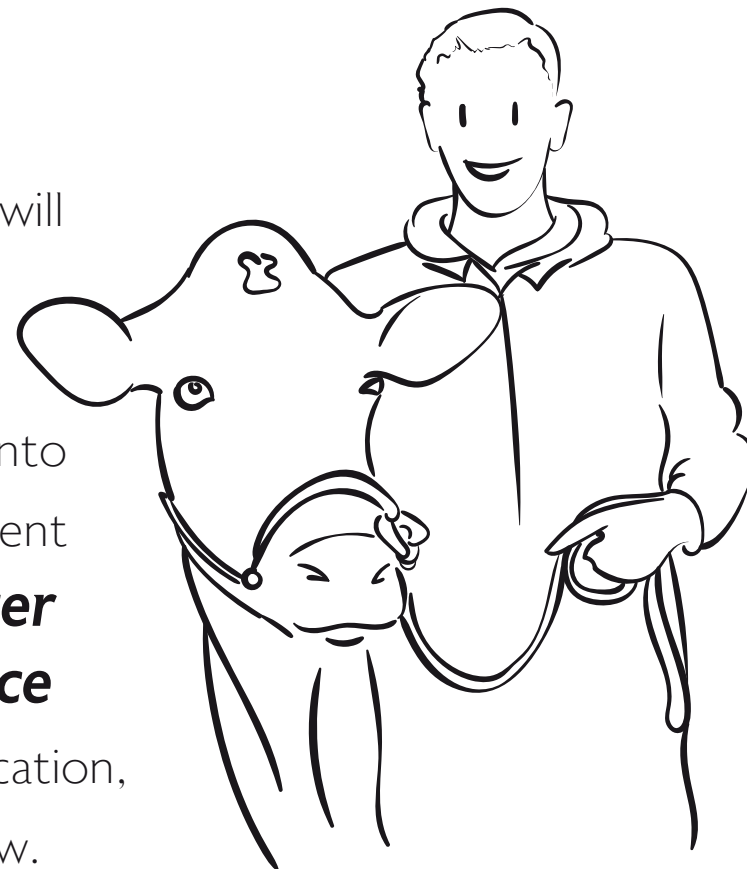
The objective of this project is to design a product or product-service combination to encourage agricultural entrepreneurs to make sustainable decisions based on their decision-making process. This assignment was set up in collaboration with LTO Noord and the DAW to find what is withholding farmers from implementing sustainable agricultural practices to improve their support for agricultural entrepreneurs.

Transitioning towards sustainable agriculture

In recent months, Dutch farmers reached worldwide news coverage due to their protests. The slow-moving tractors as well as the flaming hay bales and manure on the motorway caused delays for motorists all across the Netherlands. The farmers are under immense pressure to cut harmful emissions by making radical farm changes. The required reduction in emissions by the agricultural sector in the Netherlands is not the only topic to be concerned about. Because of climate change, the soil quality, water quality and quantity, will become a problem for the farmers. At this time, a transition towards sustainable agriculture needs to occur in the agricultural sector. This upcoming problem and transition were the starting point for LTO Noord to draft a project, which is executed in this thesis.

Young agricultural entrepreneurs

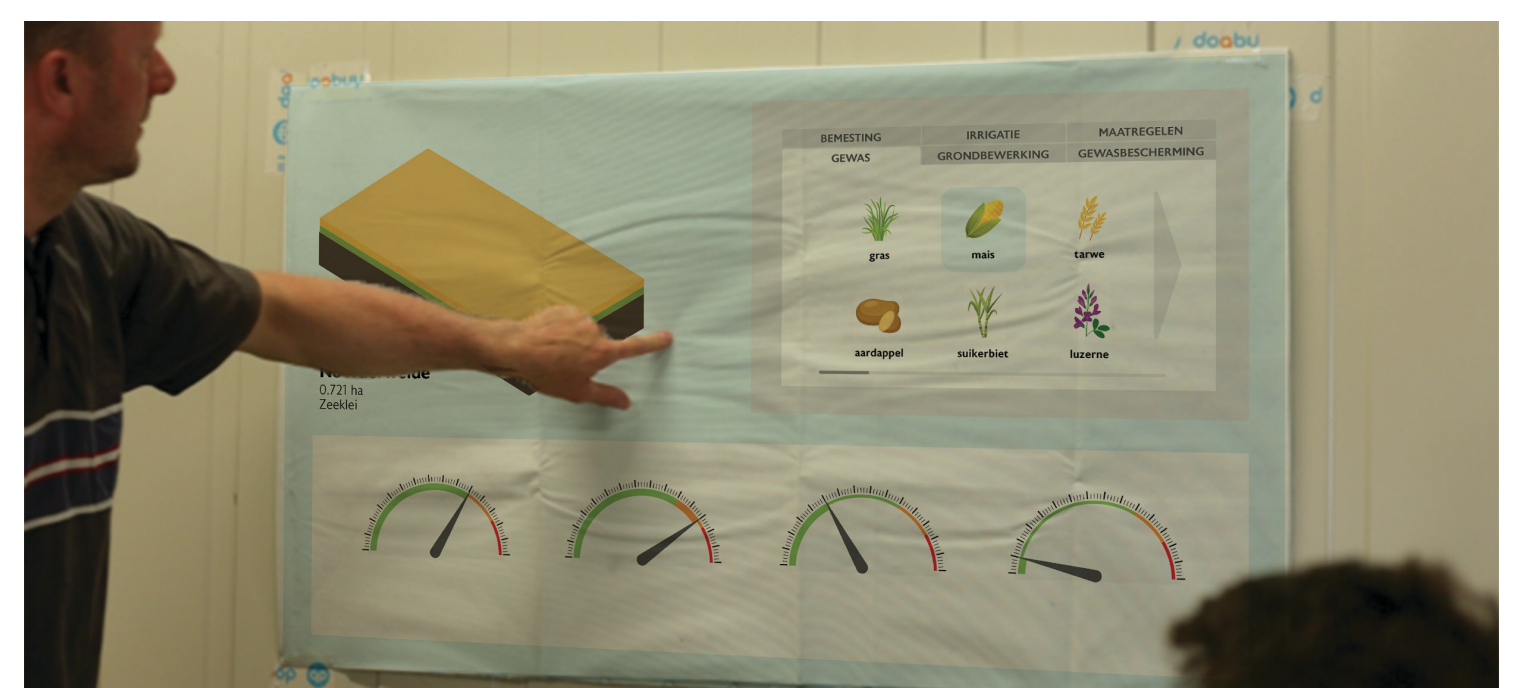
Being a young farmer on a quest to figure out what your way of farming will be, hands-on experiences play an essential role. Working or doing an internship at another farm or agricultural-related company are ways to find answers to this question. This hands-on experience may give insight into different practices and may interest the young farmer perhaps to implement it on (partly) their farm. When interested in a new measure, **the younger generation feels and experiences that they need to convince the older generation in the partnership.** The differences in education, experience and view can stand in the way of implementing something new.



“Supporting young farmers to convince the older generation in the partnership to make a step towards implementing a sustainable practice.”

The Concept

SoilMate is a tool whereby farmers can experiment with new (sustainable) measures on their (digital) farm. SoilMate embodies itself as an interactive screen in the canteen or kitchen. It simulates the farmer's farm and the possible results of changes. The concept gives access to a planning tool (the Graslandkalender), a 3D visual representation of the farm and its soil, the current and possible future data of values, and the possibility to experiment with and apply changes on the farm. The planning tool functions as the starting point of the use. Since filling in the planning will be done regularly, the farmer regularly gets in contact with the tool. The tool predicts the future values of the farm or parcel. When they are dropping low, the farmers can decide to experiment with changes. When trying different changes, the farmers can discuss possible futures and have the predicted values as support.



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Encouraging young agricultural entrepreneurs to make sustainable decisions.
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