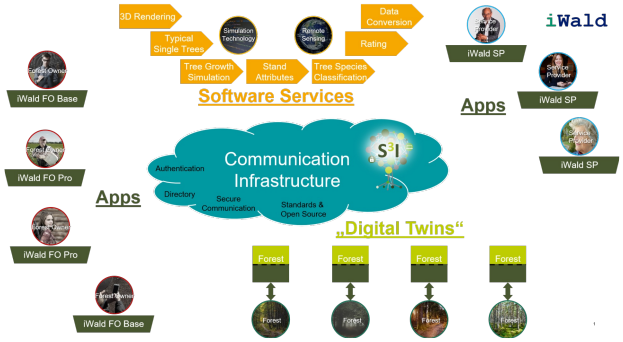
iWald | Forest growth simulation app



Comparison of silvicultural treatment concepts by simulating forest growth processes on the smartphone.

In the iWald project, a system is being developed enabling forest owners to obtain realistic and technically sound options for the sustainable management of their forests. The individual objectives of the forest owner (private, communal, state) are taken into account as well as the forestry risk minimization and the sustainable conversion of forests while safeguarding the economic, ecological and social forest functions. One of the main results of iWald will be the "iWald App", which can be used to simulate forest growth processes on a smartphone. This will be provided with different entry barriers, so that both the forest layman and the trained forester will find their access to iWald. The goals include activating forest owners, who can thus approach their forest on a playful level, or improving public acceptance of forestry interventions through the possibility of simple visualization of future consequences.

DETAILS

ORIGIN OF WOOD

--

TYPE OF WOOD

--

KIND OF WOOD CONCERNED

--

IMPACT ON ENVIRONMENT & BIODIVERSITY

Economic, ecological and social forest functions are integrated into the apps decision support system.

INCOME EFFECT

--

EXPLOITATION POTENTIAL

--

HUB

Central-West Hub

ECONOMIC IMPACT

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SPECIFIC KNOWLEDGE NEEDED

MOBILIZATION POTENTIAL

High, activation of forest owners to initiate forestry interventions is encouraged by the game character of the app.

SUSTAINABILITY POTENTIAL - VALUE

Very Positive

EASE OF IMPLEMENTATION

The solution is not yet available on the market.

EASE OF IMPLEMENTATION - EVALUATION

Difficult

KEY PREREQUISITES

--

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

--

JOB EFFECT

--

COSTS OF IMPLEMENTATION (EURO - €)

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MORE DETAILS

CHALLENGE ADDRESSED

1.- Improve forest resilience and adaption to climate change

DOMAIN

Forest management, ecosystem, resilience

TYPE OF SOLUTION

Modelling, simulation, optimization

KEYWORDS

tree growth simulation

apps

private forest owners

service providers

DIGITAL SOLUTION

Yes

INNOVATION

Yes

COUNTRY OF ORIGIN

Germany

SCALE OF APPLICATION

National

START AND END YEAR

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CONTACT DATA

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REFERENCES AND RESOURCES

MAIN WEBSITE

https://www.mmi.rwth-aachen.de/projekt/iwald/

PROJECT WEBSITE

https://kwf2020.kwf-online.de/portfolio/iwald/

PROJECT REFERENCE

iWald, funded by FNR under no. 22012818

RESOURCES

LOGO OF BEST PRACTICE

iWald

LOGO OF MAIN ORGANIZATION

Institut für Mensch-Maschine-Interaktion

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY