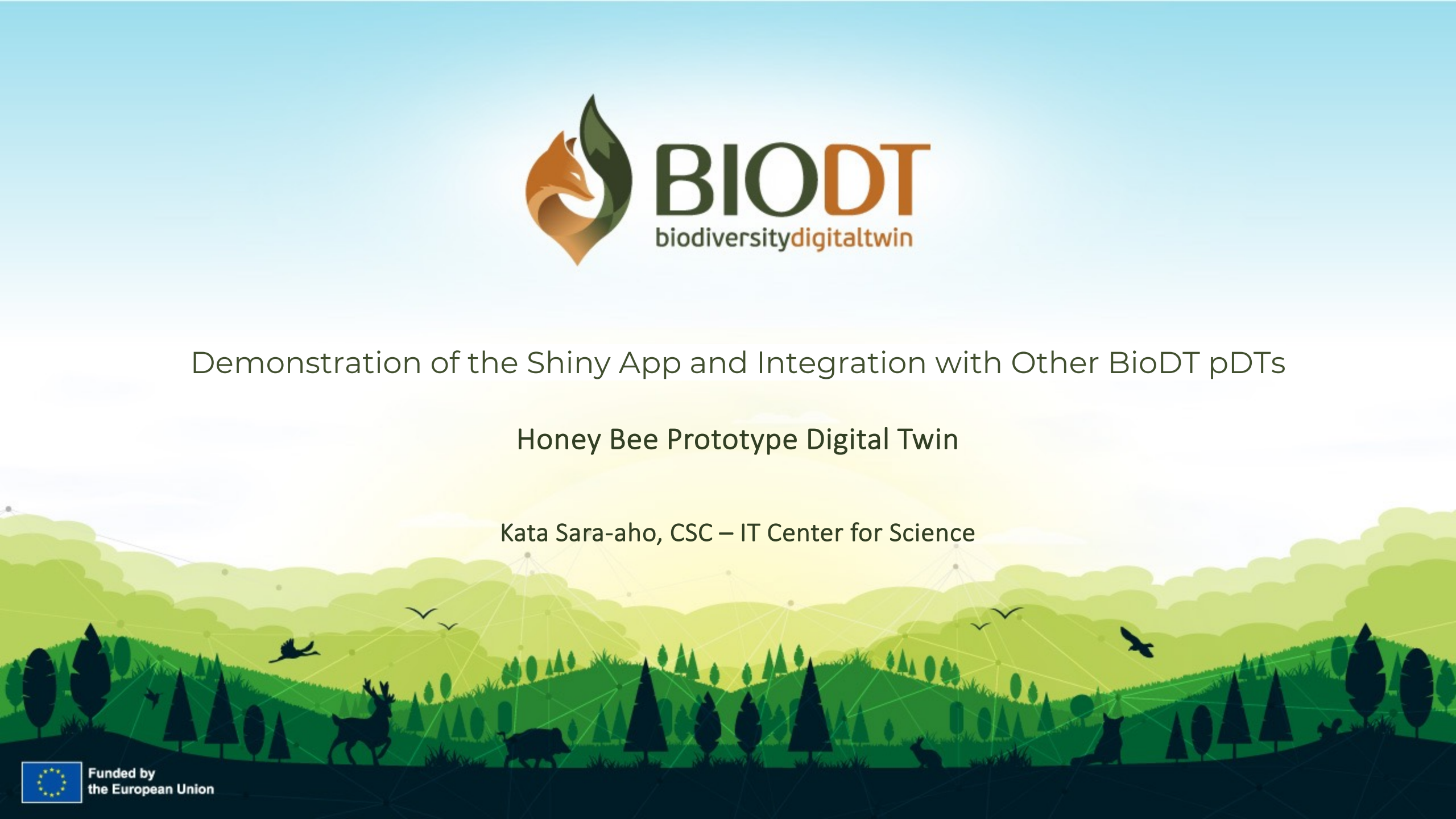


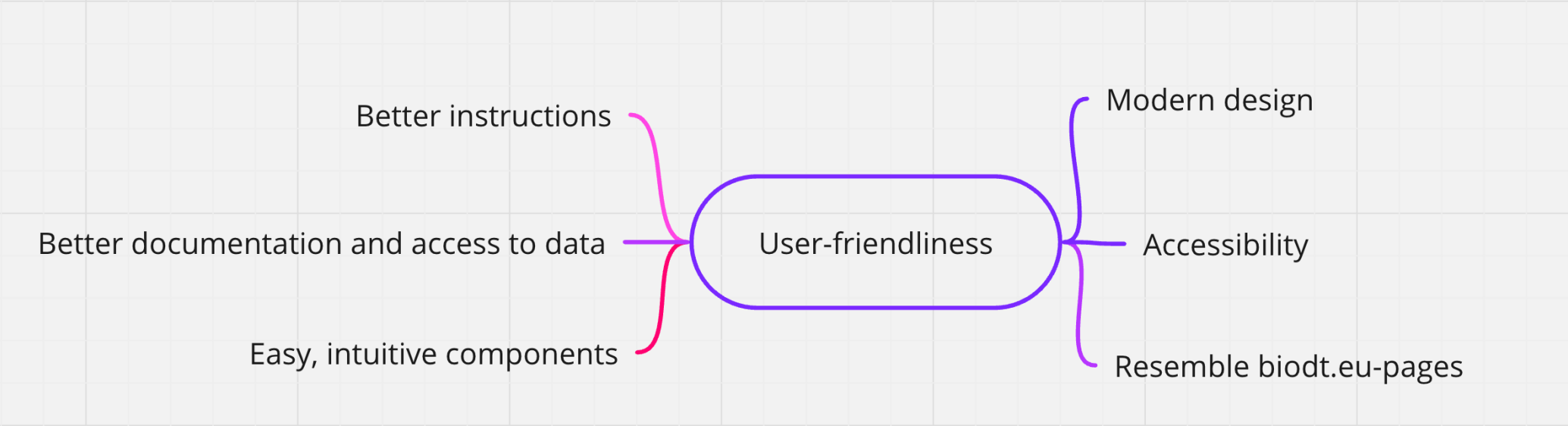
Demonstration of the Shiny App and Integration with Other BioDT pDTs

Honey Bee Prototype Digital Twin

Kata Sara-aho, CSC – IT Center for Science

Funded by
the European Union

Shiny App redesign & development

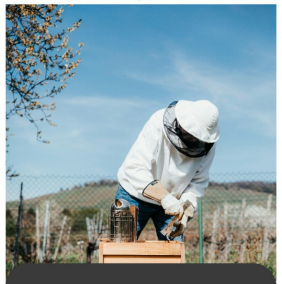


BIODT
biodiversitydigitaltwin

Shiny App Demostration

User Personas & User Story Workshop

Usertype #1



Beekeeper

Actions, Motivations and Pains

What do I do?
- Keep bees
- Produce honey

Why do I do it?
- As a hobby
- Interest in nature
- Job

What do I want?
- Healthy bee colony
- Honey

What's stopping me?
- Diseases
- Weather
- Land use change
- Regulations

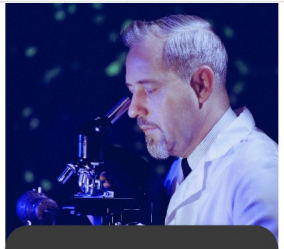
User Story

BEEKEEPER

As a beekeeper,
I want to see how well the pDT performs for my bee colonies,
out of curiosity.

BEEKEEPER

As a beekeeper,
I want to see the impact of different management options for honey harvesting,
to learn about suitable or better options.



Scientist

Actions, Motivations and Pains

What do I do?
- Research on bee survivability
- Research on honey productivity

Why do I do it?
- Beneficiality to the ecosystem and society

What do I want?
- Tool to help simulate different scenarios
- See whether simulations are sane and calibrated

What's stopping me?
- Poor findability of data
- Difficulties in comparing models
- Difficulties in defining scenarios
- Comparability of simulation with actual data

User Story

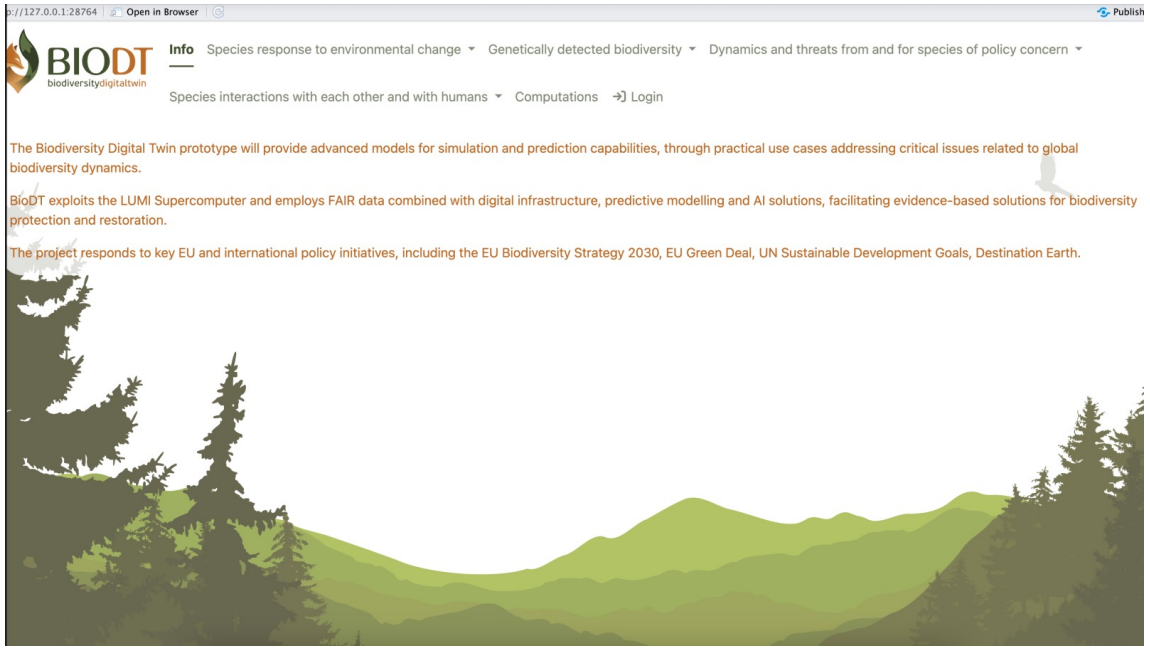
SCIENTIST

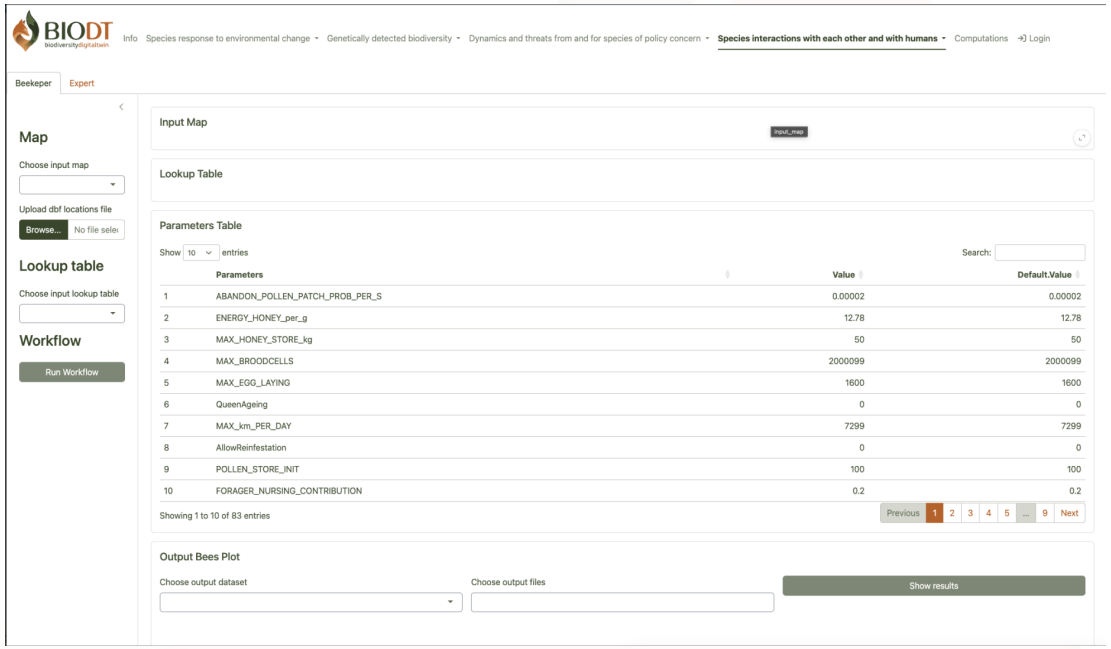
As a scientist
I want to be able to define model parameters,
execute model and visualise results
so that I can study effect of different stressors on the bee survivability

SCIENTIST

As a scientist
I want to make a model calibration so I can be confident the model is providing me with correct results which are comparable to reality.

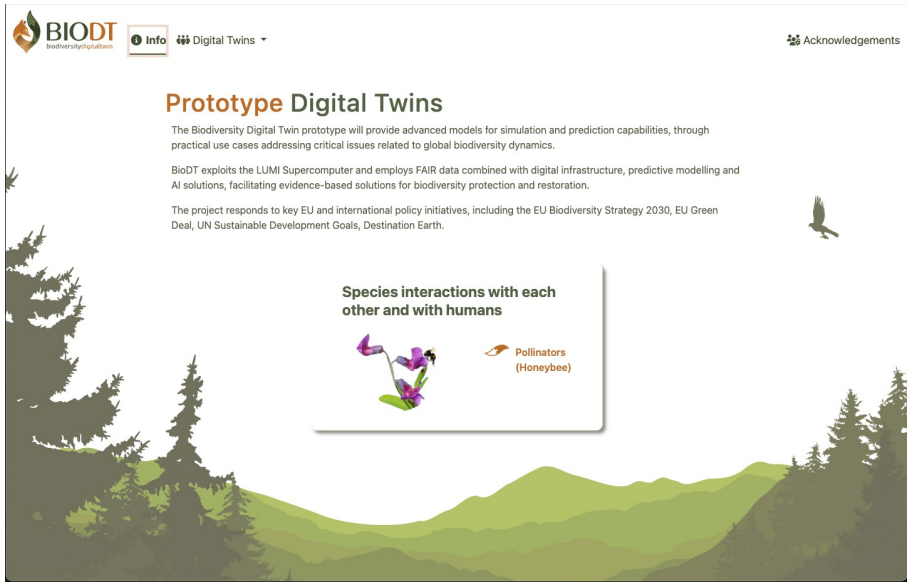
- What we have made so far – from this …

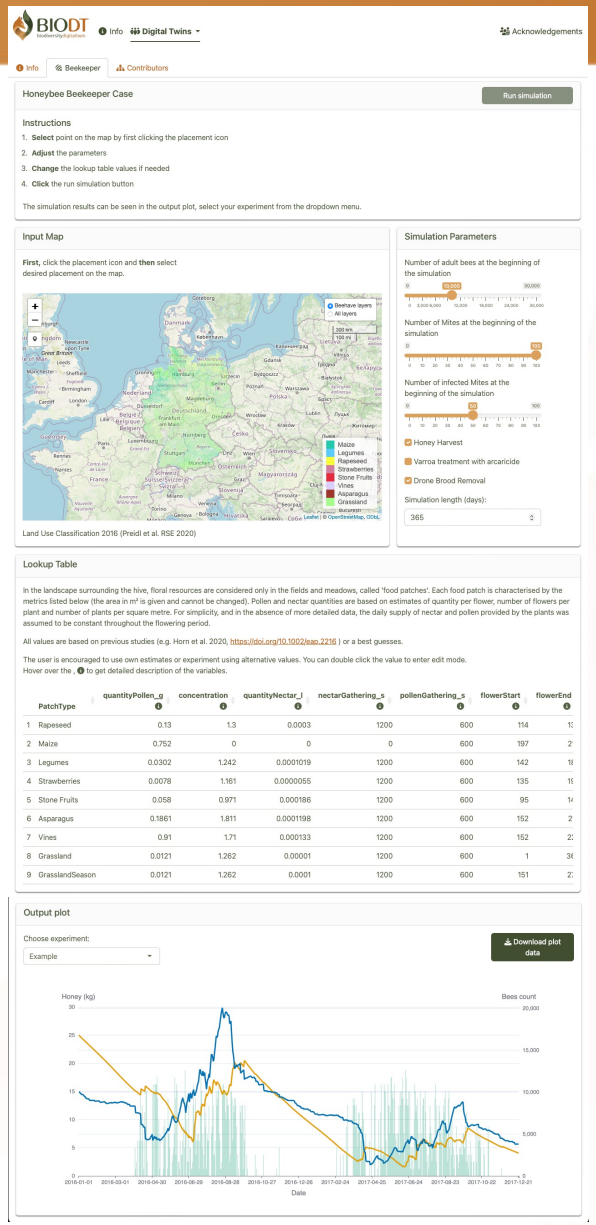




The Shiny App

- … to this!





Future Shiny App

Better accessibility	**Mobile-friendliness**
More pDTs integration and interaction more features to Pollinators / Honey Bee pDT	**Component development**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