

## Bio-Capital Management

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### OBJECTIVE

The current design project has the main goal of providing BioZH's platform with a new contour for the interactive game.

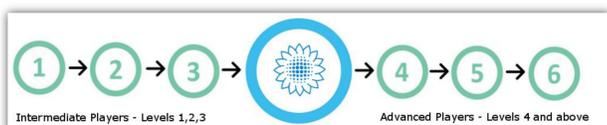
The objectives are:

- ✓ to revise the rules of the game
- ✓ to improve the means of gathering content for the bio-capital database
- ✓ to propose a new mapping solution

BioZH is a prototype of an holistic approach to manage scarce resources.

The vision is to provide people with a proactive game that will engage and link them as environmentally responsible citizens.

### GAME



Participants gain points by subscribing and adding bio-capital to the map.

Points can be spent by taking part in the activities BioZH is proposing.

By gaining and spending points the users increase in level, unlocking new activities.

- Level 1** Introduction to beekeeping
- Level 2** Honey processing workshop
- Level 3** Beehive assembly workshop

The interactive map will offer visual support in order to update participants with the environmental improvements achieved by BioZH and the latest available activities.

### BIO-CAPITAL DATABASE

- When adding a bio-capital resource the user will fill in a form
- The content of the form is adapted to each category of bio-capital (fruit trees, herbs etc.)
- From a dropdown list the user will be able to select the exact species
- By growing, the database will become a valuable asset for BioZH

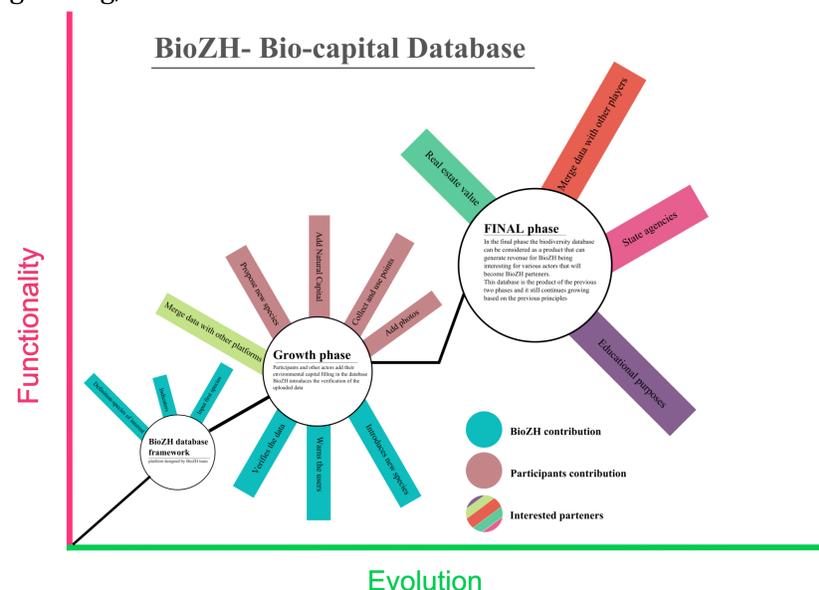


Figure 1: The evolution of the BioZH database

### MAPPING SOLUTION

#### Visualizing the bio-capital data

Each category of bio-capital is added to its own layer. For ease of visualization each layer will cluster separately.

#### Drag and drop

The user can add each bio-capital resource in the desired location, by dragging it from a side bar. Consecutive to this action the corresponding form appears in the right side of the map.

#### Privacy control

In order to offer a certain degree of privacy, over a certain zoom level the user will only see his own bio-capital data. The base layer will automatically switch in order to offer more precision for further placement of bio-capital.

#### The administrator

By the use of the drawing module, the administrator can add events to the map as well as photos that will be showed later on in the pop up of the event.



Figure 2: User's experience with the clustering and privacy control system

### PROTOTYPE

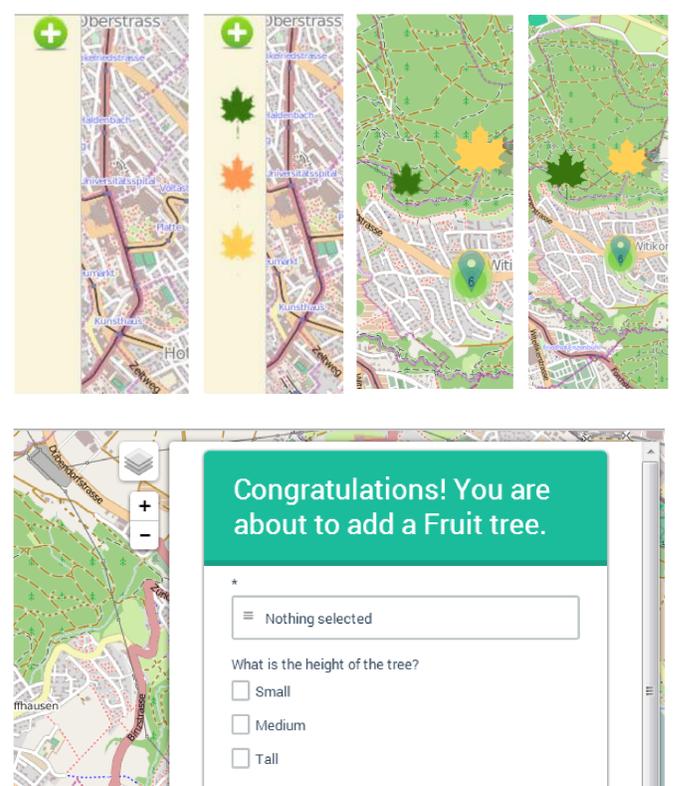


Figure 3: User's experience with the drag and drop system

\*Leaflet library was chosen for the development of the prototype

### CONCLUSION

- ✓The concepts of levels and user engagement were improved, in order to enhance the game experience.
- ✓The bio-capital categories were revised, the species were selected and relevant questions were produced.
- ✓A new prototype of the mapping solution was produced.