

Showrooms BONITA-Project

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The Showrooms

- An essential part of the Bonita Project
- The showrooms ensure sustainability and dynamic of the project
- Transforms the network into a knotwork
- “Knots” of collaboration between science and industry
- In the development of our society(ies) we need strong processes and structures for cooperation and collaboration combining and using..
- The different rationalities of science and industry..

Rationalities

- The rationality of industry is commercial value (surplus) –
The rationality of science is scientific value (truth)
- This generates different perspectives of surplus, time, solidity aso.
- To use these difference as resources instead of obstacles we structural couplings (process/structure)
- The tech trans model is the process: It generates insight in other practices – and in doing that it also become a tool of self-reflection. It develops a shared but not identical understanding, a shared set of concepts and language which enable generative dialogue.

Structure

- The showroom is the structure – It is a space which through the interactions taking place there transform into a place for reciprocal learning between industry, science, government (*Triple Helix*) and to a growing extent also civil society (*Quadruple Helix*) models
- It is a place where the potentials are demonstrated, collaborations are developed and innovations in interactions take place
- Initially it was a *showroom* in practice it becomes a *flowroom*

De-coining

- It is a place where the potentials are demonstrated, collaborations are developed and innovations in interactions take place
- We are decoining the relationship between science and industry using difference as resources in societal development not as obstacles

Bonita-Show Room

- Our Basic Concept- Multiple Dimensions of Transfer
- Combining Local and Distributed Collaboration
- Show Room and Flow Room – A Contextual Issue?

Basic description of user-friendly repository for objects to be shown in the virtual showroom

- The exhibition item would typically be accessed from different showrooms to demonstrate various solutions and to tell stories about research and tech trans.

Basic Challenges

- Getting things
- Showing things
- Finding things
- "Things" are the artefacts of collaboration. The reifications of processes

I told a group of young researchers

- Create a tools for transforming physical devices into 3D Models which could be manipulated
- Easy access
- Easy upload
- Affordable
- Dynamic

”Getting Things”



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Abstract

- The **Knowledgelab 3D Scanner** is an add-on to the open source modeling and animation suite Blender [1]. We use Blender together with the Microsoft Kinect Sensor [2] to generate three dimensional models of physical objects. The Kinect device captures depth information of an object and sends it to Blender where the information is interpreted and used to construct a 3D model of the given physical scene. This enables users to quickly generate three dimensional representations of real-world objects without the need to learn how to use 3D modeling tools.

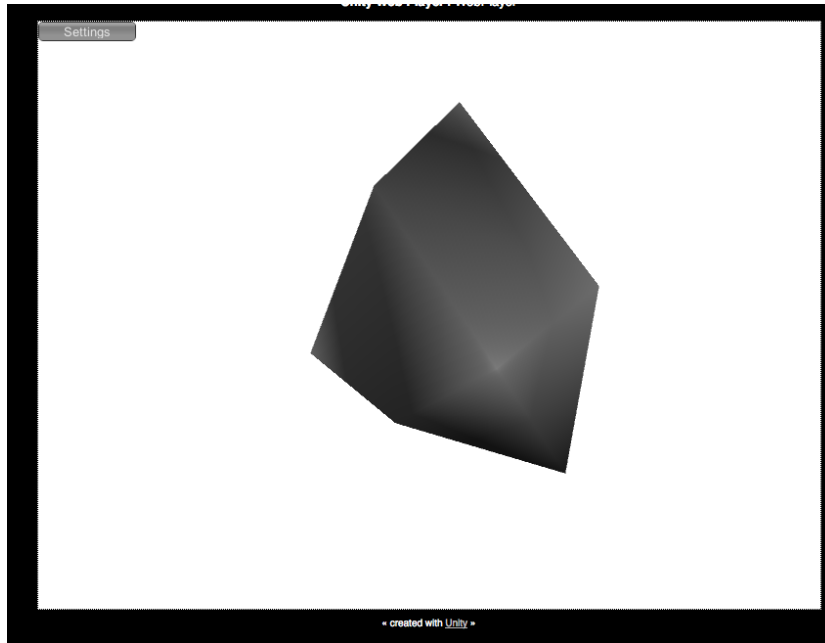
Abstract

- **Technical Details**
- The software is written in Python and C#. The latter allows us to use the official Microsoft Kinect Software Development Kit (SDK) [2], which is unfortunately currently limited to educational and research purposes. The former is the standard API of Blender to extend its functionality.

Abstract

- **Things to Come**
- In its current state, the **Knowledgelab 3D Scanner** does not yet produce full 3D models. Instead so called point clouds are generated. The next steps will be to connect these points in a way that the original object's surface will be reconstructed (Delaunay Triangulation, Divide & Conquer). After that, we plan on integrating either marker tracking technology or SLAM (Simultaneous Localization and Mapping) to keep track of the current camera position in the physical world relative to the scanned object.
- This will allow us to generate 3D models of whole static objects, as the algorithm will make sure that each new 3D point cloud will fit to the last recorded one so that one coherent model is produced.

Showing things



<http://knowledgelab.dk/diverse/showroom/WebPlayer.html>

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The "Crew"



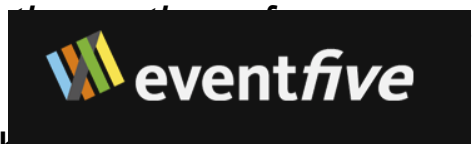
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Finding "Things"

It should be possible to access the single item in 3-4 different but interrelated formats: Pictures of the actual object (item); 3d model; Interview or storytelling from the researcher/researcher group who has developed the actual item; Technical description

- The user should be able to find the different objects through different metadata. These metadata should be chosen from a list when uploading images, films photos.
- *The users should have the possibility of commenting on the item – and to ask questions.*
- Developed together with.



Finding Things 2

- The upload of items should be easy – and the process well documented. It should be possible to upload new versions – and there should be a history function here.
- The single item should be related to a personal identifier
- IPR should be stated
- Metadata- the metadata set will be developed by the project partners. The metadata set will be provided to the developers.
- The movie part/interview could be uploaded to youtube and accessed through an URL:

The virtual showroom

- Enhances the potentials of the showrooms
- Integrates the different showrooms
- Enables knowledge sharing and development at a new scale