GUI design & ontwikkeling in de machinebouw

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• What is User Experience design?
• What is the added value in engineering?
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What is User Experience Design?

The focus of UX is on web and mobile
What is User Experience Design?

But UX goes beyond a pretty User Interface and Usability
What is User Experience Design?

Great UX meets the users needs
What is User Experience Design?

Great UX fits the users workflow
What is the added value?

Software design in the field of engineering

Hardware

Software

User
What is the added value?

- Software is increasingly becoming user centred
- User experience is a selling point
- Good UX ties all functionalities together
- Clients are triggered but lack the necessary expertise
Greefa – Fruit grading machines

Producer of fruit grading machines
Greefa – Fruit grading machines

A full redesign of the current grading software
Greefa – Fruit grading machines

Fruit is graded using various measurement systems.
Greefa – Fruit grading machines

Quality is measured by photographing each piece of fruit.
Greefa – Fruit grading machines

Weighing and measuring each individual piece of fruit
Greefa – Fruit grading machines

Each individual piece of fruit is transported to the designated outlet.
Greefa – Fruit grading machines

Where it is packed for shipment or stored in the warehouse
Greefa – Users

Large Corporations

• High functional demand
• Large quantities of fruit
• Automated processes

• Regulated sorting processes
• Multiple operators, different roles
• Often inexperienced or uneducated
Greefa – Users

Small fruit growers

- Low functional demand
- Often sorting their own fruit
- Packing often done by hand

- One or two key operators
- Working by intuition
- Little computer experience
Greefa – Current software

Analyses of the current grading software
Greefa – Current software

Multiple screens used for monitoring running processes
Greefa – Current software

An accumulation of functionalities throughout the years
Greefa – Current software

Complex UI for creating sorting programs
Disconnected from the workflow
Greefa – Wireframing
Greefa – Wireframing

Iterative design cycles

1. Design
2. Prototype
3. Evaluate
4. Design
5. Prototype
6. Evaluate
### Agile approach
- 2-weekly sprints;
- Iterative process;
- Embrace change into the process;

### Technical constraints
- Compatible with the old software
- Include all current functionality;
- Windows XP and Windows 8 compatible;
Greefa – Intelligent Grading Software
Greefa – Intelligent Grading Software
Beta Testing
Lessons Learned

• Outsourcing works very well in these situations
• Agile software development offers the flexibility needed
• Domain knowledge is vital. Invest time and effort to obtain it!
• Part of the job is teaching your clients
• Involve your clients in the design process
Questions?