



Designing Sustainable Food Systems for the Point of Sale

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Research Question & Approach

How can we design assistance systems to convince customers to buy more sustainable products at the point of sale?



Innovation Workshop



One day, 22 stakeholders

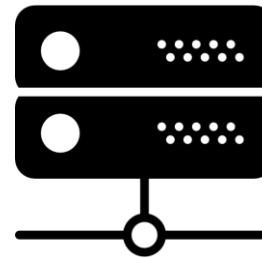
Personalization



Dimensions of sustainability

- Regional Origins
- Labels
 - Organic production
 - Fair trade
 - ...
- Catch Methods
- Contained Allergens
- Obsolescence

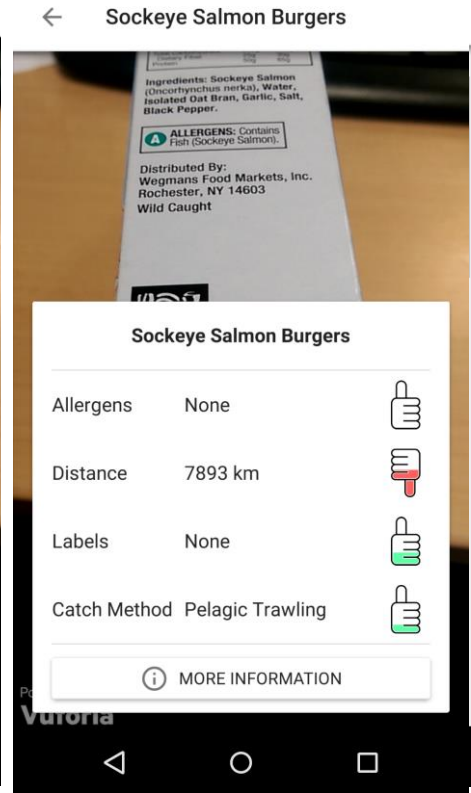
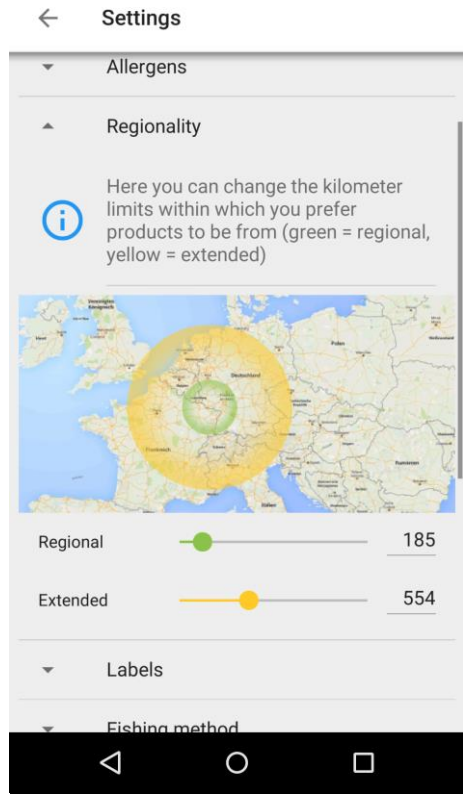
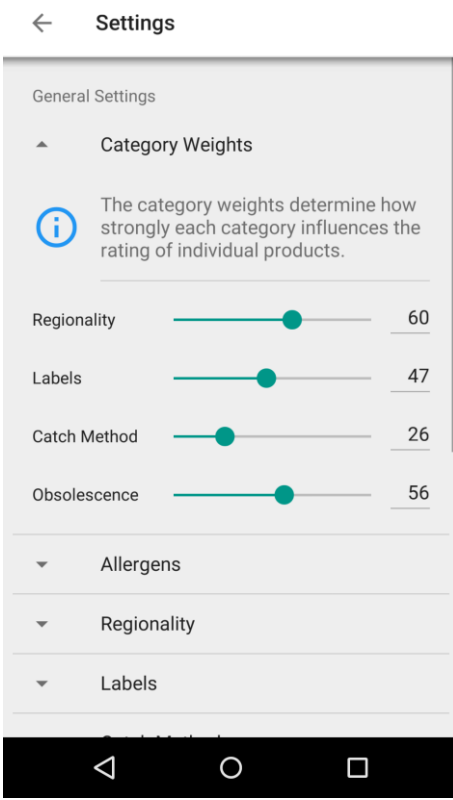
Data source



Visualization



Mobile Prototype



Evaluation in Supermarket



- 9 participants
- Shopping twice
- Focus group discussion



Aspect of Sustainability	Shopping List 1	Shopping List 2
Catch Method	Deep Frozen Salmon (11)	Deep Frozen Saithe (7)
Organic Production	Fresh Milk (31)	Yoghurt (97)
Fair Trade	Ground Coffee (42)	Chocolate (179)
Allergens & Labels	Chocolate Muesli (57)	Spaghetti (55)
Regionality	Packaged Tomatoes (22)	Packaged Apples (13)
Obsolescence	Toothpaste (106)	Toilet Cleaner (110)

Evaluation in Supermarket



Behavior Changes

- All reported a change in purchasing behavior
- A third of the participants stated that they purchased other products than their usual choice with app due to better match
- Comparison instead of trust in brands
- Feeling of success when finding “better products”

Side Effects

- 2 reported a zombie-like shopping experience
- Calm own conscience
- Rebound effects

AR Prototype



- Support hands-free shopping
- Overcome zombie-feeling
- Cloud-based user profile
- Recognition using feature tracking → faster scans
- Depending on distance differently detailed visualizations



<https://msdnshared.blob.core.windows.net/media/2017/02/hololens.0.0.jpg>

Conclusion

- Workshop and evaluation showed great interest in sustainable food systems
- Multiple aspects of sustainability must be incorporated
- Highly individual understanding of sustainability
- Trust in data and topicality
- Assistance systems can convince customers to buy more sustainable products

Future Work

- Larger study
- Discussing idea with large German retailer