

# Food Futures Fieldwork Report 2022

Activities and insights from the first pilot of ATARCA Food Futures concept conducted as workshop series for the 'Sustainable Consumption MOOC' to test the usability and functionality of the app which generates 'Participation and Foodprint tokens'

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Curator and facilitator: Shreya Soof  
Co-facilitator: Ruta Jumite

Every Thursday from 17th March to 5th May at 11:30–13:30  
Kaivopiha, Unicafe



# Workshop objectives

Communication, introduction and adaptation to the index, new technology and community impact ecosystem

Testing UX/UI (beyond digital interface)

Opportunities and limitations to move from rising awareness to real actions and practice change

## **Theme of each work- shop**

**1**

**Introduction to  
the project**

**2**

**On boarding of  
the application**

**3**

**Journey mapping**

**4**

**Persona building**

**5**

**Index feedback**

**6**

**Incentive  
feedback**

**7**

**MOOC and  
course feedback**

01

# **Aim of the session**

To get to know each other

To introduce the project

To share the practicalities of participating in the workshop series

## **Activities**

Introductions based on education background and hobbies

Reading and signing of the consent form to maintain anonymity of the participants, permission to audio record some sessions, and also take photographs for documentation

# Findings

In this session, the goal was to set the stage for the coming weeks and understand the expectations of participants to be able to cater to some. Some expectations that surfaced are:

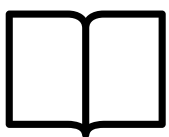
Participants hope to create a safe space so they can feel free to express themselves.

A few of them are curious about our process of how we reached this concept.

Several of them are curious to learn about block-chain.



**12 Participants,  
divided into 2 groups**



**Masters and Bachelors level  
Backgrounds including Environmental  
Science, Psychology, and Political  
Science.**

02

# Aim of the session

## To introduce the app

## To set up the app testing on participants' devices

## To gain preliminary feedback

# Workshop Activity

## Gain feedback on first impressions of the application



# Activity 1 : App Feedback

I like		I dislike	Got Confused	I wish	
It is nice to know you can change your concerns later	The aesthetics +drag and drop	QR code scanning is not working	Some parts of the index were still 'empty' even though I chose all the concerns	The quadrants of the index should be clickable	It would be nice to see information about each sustainability concern. For example: why should I be interested in land-use?
Aesthetically pleasing 🌟 Nice font choices, UI felt easy to use	The index is pretty clear and the options are easy to compare	Did not understand where we can use the crypto towards. Eg. what is community incentives	It is hard to understand which option is good → Does green block mean good?	I wish I did not have to prioritize the variables	More available data to the user
The interface and visuals are light, fun, and simple! Star	Straight forward registering	Concerned about everything. Unsure about 'material footprint'	Counter intuitive color and size +1 Transparency was confusing	Information on how meal-choices after the amount of tokens gained	I wish there was some education on different concerns. I do not know what they all mean, or what impact they make
Visuals <3 Fun and simple	Shows best options based on my priorities	Setting up crypto wallet notification disappears fast, easy to miss	Hard to choose 'my concerns'	In history, I would like to see both previous meals I have chose and also cumulative data on the environmental impact	I wish to see the data of impact and also the logic behind how the impact created is measured. What is the methodology behind it
Overall, the app was working efficiently and was intuitive to use	It is easy to compare different meal options	When you choose to not track the calories and protein option, you still see it in the index. I do not think this is very eating-disorder friendly	Was uncertain what index meant?	I wish the app was more educational by sharing more information on each matrix +5 : There could be a read more section for each variable	I wish the landing page was the one where it shows what I already validated
I like that the app ranks choices "best option" based on your concerns to help make a choice	Color and design of introduction Simple characters, not too packed	I do not really understand why you need to choose the sustainability concerns of your interest, wouldn't it be good for everyone to be aware of all impact?	Index: colors make sense, combination of colors and levels on the index make intuitively less sense and are not explained	It would be interesting to know more about how the environmental impacts have been measured	Need more explanation on colors and numbers +1 Maybe there could be even more clear explanations for the colors
The app looks visually pleasing		In the index, some concerns were highlighted some were not	Wasn't too clear about the sequence if concerns	I guess this is just a personal preference, but I think when choosing the sustainability concerns, it would be more intuitive to just click the option	Material footprint is a new concept. A tutorial or read more option which is available at all time would help
		My first impression was that the buffer the slices, the worst it is, But I understood it afterwards	Why are some slices of the pie 'darker' than the others?	Under lunch options, it would be nice if allergy information was included	I thought the bigger the slice, the better But I understood quickly. It would be nice to see the numbers of impact
		It was not clearly communicated how to use the crypto in the introduction	Clicking on semi opaque protein and calories on pie chart. What does that mean when it goes more green?	The register button could take you to another page to make it clearer	Want to know the source of data
			The app includes an assumption that I already have some kind of awareness of the possible impact of my food choices. Could there also be some resources from where I could learn more about the impact?		
			Did not understand what I can do with earned crypto (from the intro)		
			Crypto wallet? Not explained		
			Verifies lunch could be viewed in etherscan, but where is that?		
			What is material footprint?		
			Is the best option indicated based on my concerns? + 1 What is the best option?		
			Hard to interpret what is high and low in relation to good and bad		
			Options for caring about calories mean less or more? I assume protein means you prefer more protein?		
			The index is clear to understand but required a bit of thinking... I thought at first that the larger a 'slice' in the index, the worse the effect in the field but it is supposedly not		



# Findings

Participants find the visuals of the application friendly to use and simple to understand.

Participants are curious to learn more about each of the variables of the index. They would like the application to be more educative.

Participants seek the need to be communicated about the role of tokens and cryptocurrency in the application ecosystem.

Participants found it counterintuitive that the increasing size of the pie chart wedge meant its causing more wellbeing to the matrix. They also found the colour-gradients in the index hard to understand.

03

# Aim of the session

To understand how the index affected participants' decision making

To encourage participants to reflect on their reasoning

## Activities

Read the index of menu items and purchase a meal before coming to class

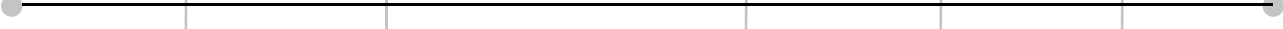
Validate the QR code while entering the class

Have the meal together and understand the social dynamics

Recreate a journey map of their steps

Give feedback on scope of improvement

# Activity 1: Journey Mapping

Stage	Starting to think about lunch	Opening the FF app	Comparing the index	Making a choice in mind	Went to the queue	Bought the food	Ate the meal/ after thoughts of eating
							
Location	On the way to Unicafe in the bus/ metro	Unicafe	Unicafe		Unicafe	Unicafe	Unicafe
Thinking	I'll open the app beforehand so I do not have to make my decision in a rush	Luckily, the app was easy to open	At first I eyed all the options. I usually choose the vegan option, but I was quite hungry and wanted something more filling. so, I chose more protein rich option		I bought the option that i had planned	Everything went easily	Realized that there were much more side dishes from which I did not have any info
Doing	Preparing to open the app	Opened the app	Scrolled the app		FF app closed	Read the QR code. Showed my student card	FF app closed
Feeling	I'm hungry	This is similar to something I've done. i usually check out the meals beforehand	I was surprised about the fact that halloumi pasta had the worst index. Data made me feel better about my default choice of prioritizing vegan over vegetarian		Feeling effortless	Feeling effortless	Yummy! Felt good about knowing more from the meal I purchased
Opportunity		It's nice to know more about the meal options and it's not any more time consuming than checking what's on the menu beforehand	Got a bit confused about the calories part. Also it was difficult to compare pasta with fish since the index didn't include side dishes		There might be an opportunity that the Unicafe doesn't have the option you are looking for	If the verification code is somewhere near cash it might be difficult to get it done since I already have to open my student card	I think it would be better if the QR codes would be on the table
Threat		I'm in a hurry and don't have time to open the app. App doesn't open etc.	I'm very hungry and choose my meal just based on the taste		Usually when I am eating with my friends I feel I'm affected by their choice. if everyone is taking the vegan option, I'll probably take that as well		One might forget to read the verification code



# Findings

Users' journey map was overall smooth, and after continued use, it started feeling effortless to navigate the application.

Users reported having read the index and making a preliminary meal option, for instance while commuting to Unicafe or before leaving the house. There was slight contemplation on this pre-formed choice based on how the food looked or if the served option was different from the one mentioned in the application.

“

Would like to see the index also for carbs as they are the same everyday. So it would build a good baseline.

Usually when I am eating with my friends I feel that I am affected by others' choices. If everyone is taking the vegan option, I'll probably take that as well.

”

04

# Aim of the session

To assist in recognizing alternative solutions

To brainstorm futuristic ideas for the benefit of people and planet

To diverge — coming up with a diversity of ideas, having open discussion, and suspending judgment

## Activities

Persona Building

Future Visioning

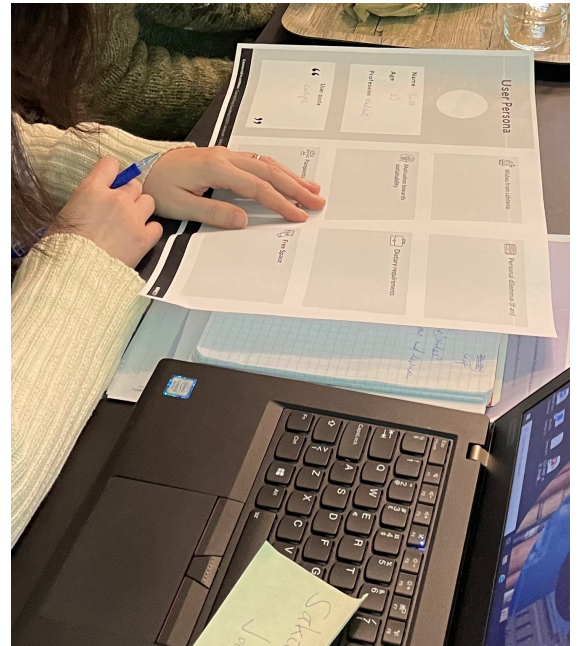
How Now Wow activity



# Activity 1 : Persona Building

The participants were asked to create fictitious personas to open up conversations around sustainable consumption from the view point of different stakeholders. They did so by imagining different requests of Unicafe, discussing personal dilemmas and motivations when it comes to sustainable meal choices.

Here are the four personas that were built:



## **Veikko Kekkonen : Industrial Worker**

Veikko regularly eats at Unicafe with his colleagues as they work in the vicinity. He wants Unicafe to bring back red meat as he feels it satisfies him more after the strenuous work. He is not very tech-savvy and does not have much interest in using the application. But, because he suffers from cardiovascular problems, he is aware that eating more plant-based meals could be better for him.



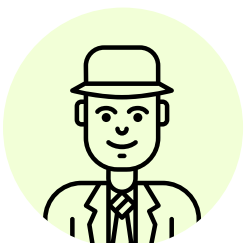
## **Jussi : Recent Graduate**

Jussi is a bachelor's graduate from the school of mechanical engineering. He likes to focus on body building in his free time. For this, he relies on animal-based products even though he knows that is not very planet-friendly. His thesis was on energy efficient transportation and prefers to fight climate crisis through his professional contributions.



## **Liisa : Student**

Liisa is a health conscious individual who wishes Unicafe to offer more organic food. She wants the entire agriculture industry to be chemical-free. She also feels the taste of the food to be very important and ends up wasting a lot of food if it does not satisfy her taste buds.

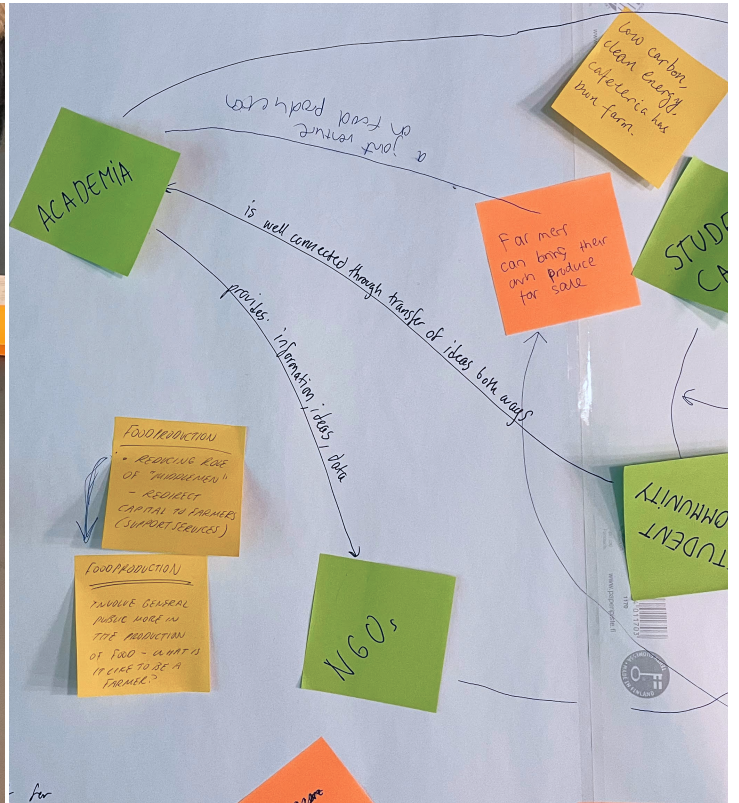
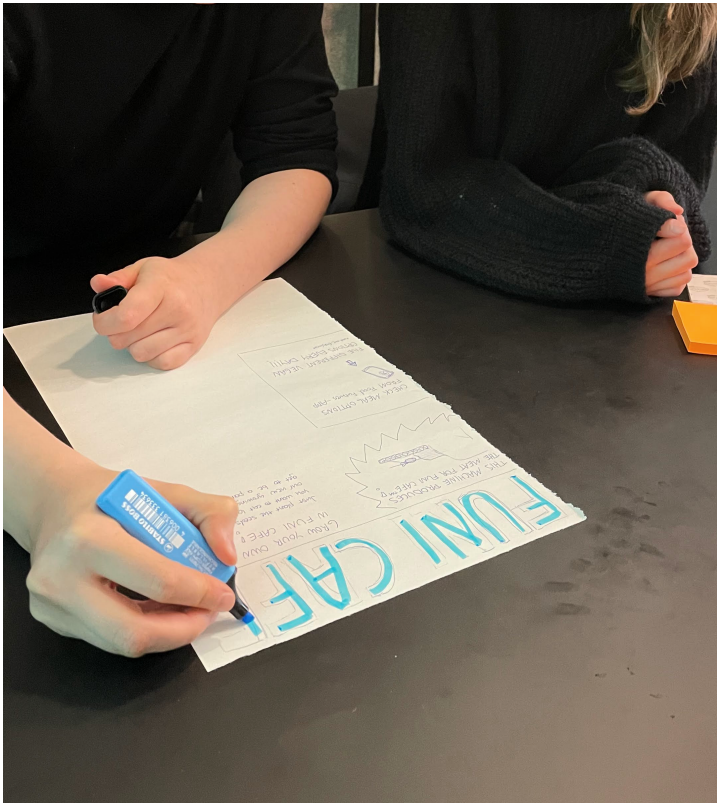


## **Ronald Rump : Investment Banker**

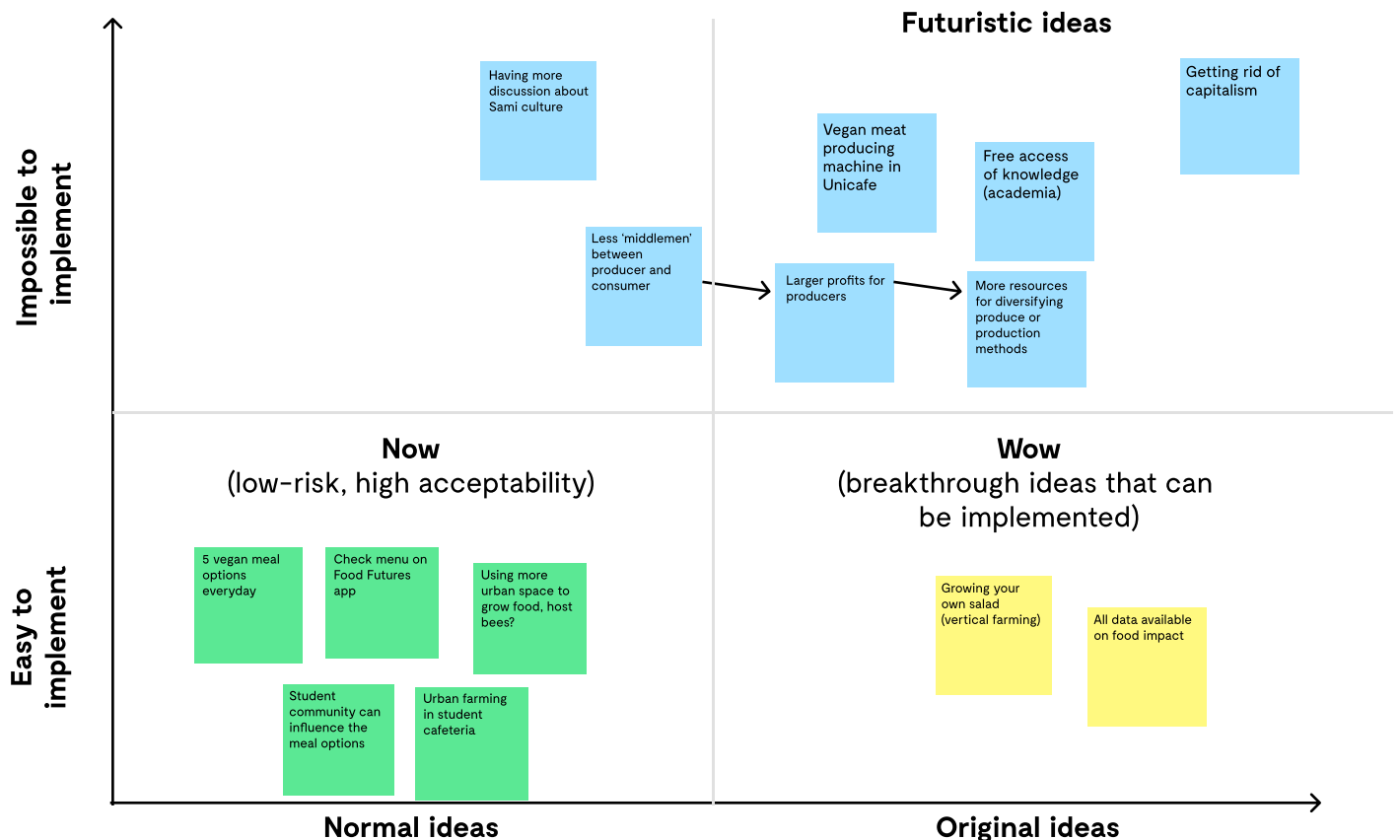
Ronald is a University of Helsinki alumni and visits Unicafe to relive his student days. He detests the soy-based products that he sees all around him these days. He often feels attacked when someone asks him about his dietary preferences. He prefers eating Finnish-origin food in every meal and does not like being told by others how he could shape his personal choices for collective wellbeing.



# Activity 2: Future Visioning



# Activity 3: How Now Wow activity



# Key Findings

Participants speculated if a system like this would risk widening the social gap and repel some users, since already conscious individuals stand to gain more from this kind of system without needing to change their habits.

Through persona building, participants noted that there is a lot of diversity in people's motivations, and for some people the idea of gaining something or saving money may be an important factor in their decision making process. Therefore, they discerned that since climate change is such a big problem that it is worth trying different methods to address it that would cater to a large and diverse audience that visits unicafe.

While students brainstormed on future visioning of food systems, a discussion on the possibility of providing farmers and producers with NFTs to directly support them through transparent and fair compensation. Such ideas would empower the app users to directly be able to make a difference by using anti-rival systems to benefit those who stand at the forefront of climate and ecological breakdowns.

05

# Aim of the session

To iterate the index, enhance it, and avoid confusion

To get feedback on valuation aspect of the service

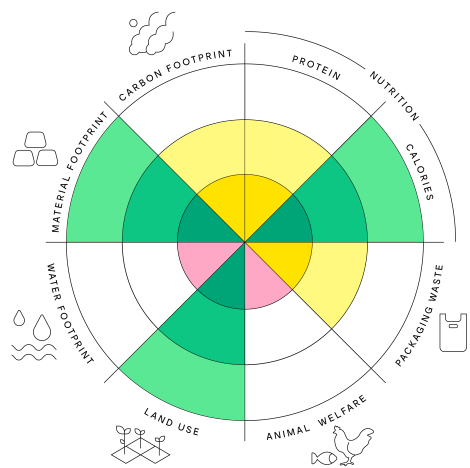
To understand the impact on choice of colors for various kinds of participants

## Activities

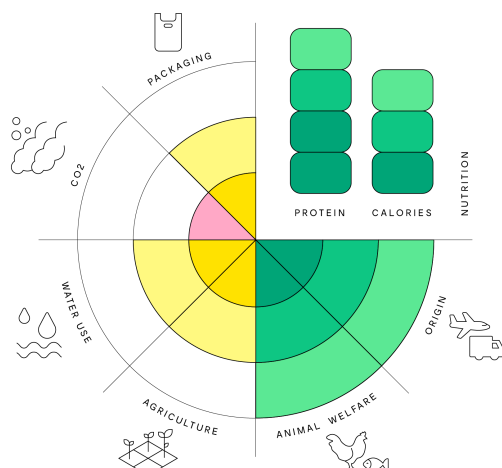
Discuss the commonly surfaced problems of index

Visualize other variations of the index to avoid these commonly occurring miscommunications

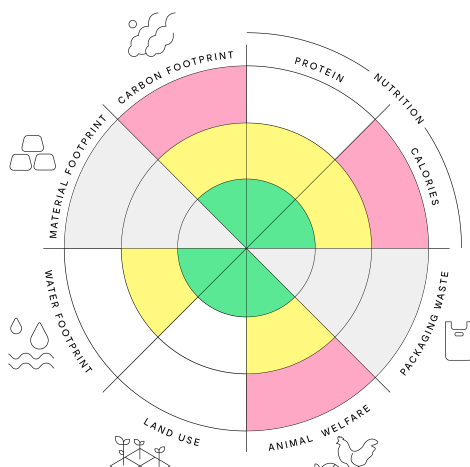
# Variations of the Food Wellbeing and Suffering Index



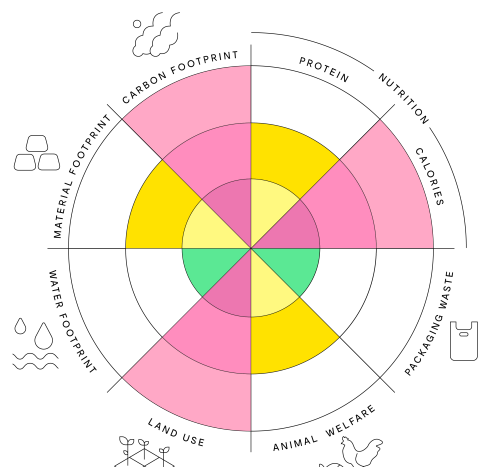
The one in use



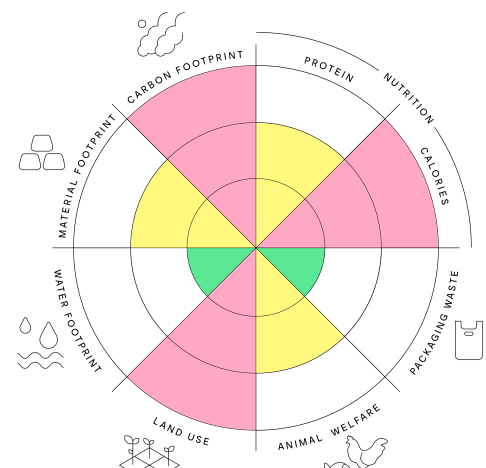
The one with nutrition outside



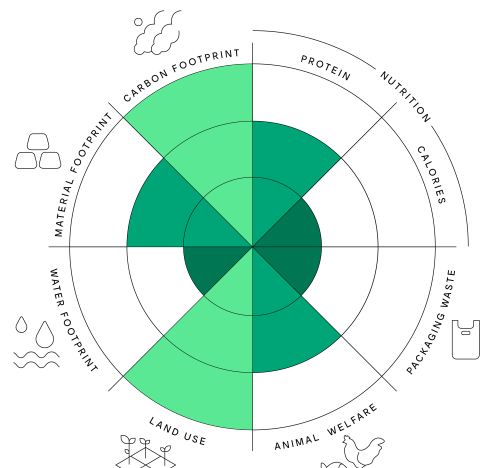
The one inspired from Planetary boundaries



The one avoiding the use of red

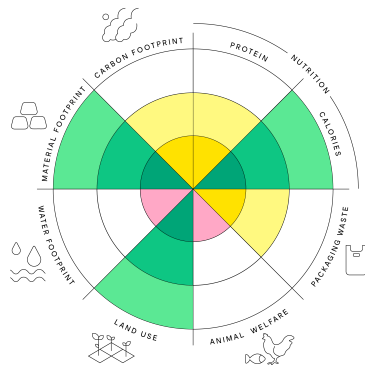


The one with no color saturation



The one with different shades of green

# Activity: Index Feedback



The one in use

It is easy to see what a good option is just by glancing (lots of green vs lots of red)

The use of red yellow green is pretty intuitive  
+2 easy to understand which color is good and which is bad

Colors are still confusing to me. Maybe numbers could help in understanding the meaning

Confusing to know the ;worst' effects are the smallest slices

Is there a way to show overall score? Is that even helpful? Eg. how meal scored out of all areas?

The three parts are a little confusing. I first thought that it was a scale

It is not clear what is the magnitude of wellbeing or suffering and how it is measured

The color saturation are confusing

I feel that the scale should be flipped. The more colored pie should mean high emissions, therefore worst

While the colours are intuitive colour saturation is not. Similarly, the scale of what is better and worse is confusing

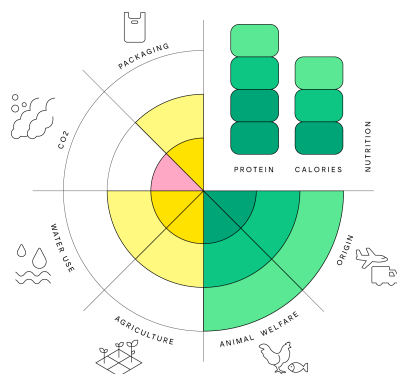
I like the icons behind each variables

I do not like that there are many aspects to consider while trying to understand the index. Explanation would be nice

I do not like that there are many aspects to consider while trying to understand the index. Explanation would be nice

Calories part is confusing. Is green meaning many or few calories? People have different goals

What does green mean when looking at calories? ( a lot of calories or little)



The one with nutrition outside

Consider using other term than calories as it feels like diet language and doesn't tell me about the nutritional value

Not as aesthetically pleasing as the first one

The register button could take you to another page to make it clearer

Makes user feel empowered in choosing a 'green' option

Need more information of the impacts and issues. eg. water use, animal welfare etc. So that lazy users can quickly learn about the issue without having to google it as many won't

Calories could act as a trigger or promote obsessive behavior

Protein and calories could be displayed as a numerical value, which leave vague interpretation to the user and their goals

Why does the green color gradually move towards red color?  
+2 What does shade of color refer to? Shades are confusing

The more green feels empowering (of your impact). It makes you feel like bad choices have big bad impact and green have little insignificant impact

I think it is useful to see the protein index, but I am not sure if seeing calories is of use

I like that nutrition is separated from other parts

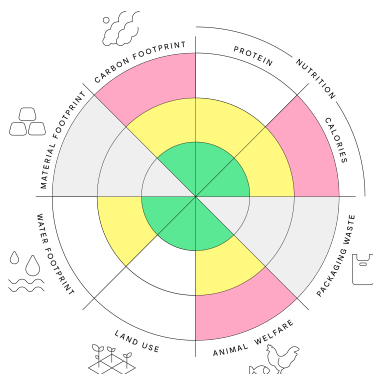
+1 I like that nutrition and sustainability are clearly separated

It is better to call it carbon emissions than just CO2

Maybe we could introduce more nutrition index like fat, sugar etc. And provide recommendation level?

Personally more calories is a bonus for me (healthy food). The protein/ calories 'stacks' are confusing for me (more stuff to understand)

If you are going to have calories, it could just be number of them. The it doesn't have to be good or bad amount of them or it could be a scale. eg:  
0 500



The one inspired from Planetary boundaries

I find this one quite difficult to grasp. especially which block is the best. Should I look at the portion or the color?

Confusing: a lot of colors takes a while to grasp  
Pro: Larger slices indicate worse effects

I am more familiar with this type of index, so I think it is easier to read than the one in the app

The color is a bit confusing and hard to read to read. there are gray material footprint and packaging waste. I feel confused about the use of gray

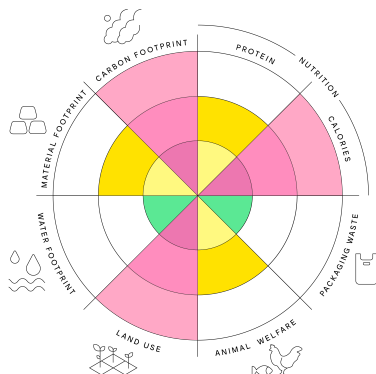
The pink is kinda too cutesy to indicate being bad. i do not know if showing all the different colors is useful

Confusing with different colors everywhere. It is not clear what a good option is

Potentially more discouraging

Not a good idea to fill one slice with all colors

# Activity: Index Feedback



The one avoiding the use of red

It is easy to see and which one is the worst

This one makes more sense to me

The visual significance of red is important

Good that it is showing reality even if it's not the most aesthetically pleasing

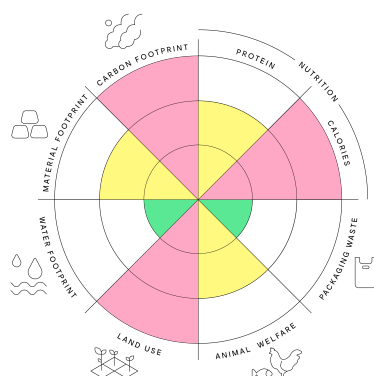
Lots of red in the index makes it more powerful to warn me. I like this way of coloring

'Shame' could have positive effect BUT could alienate certain groups of people

I like this way of coloring the index more than the one in use

I do not mind a lot of red, it is easy to avoid meals with a lot of it

I feel that the color saturation creates the expectation that there are more than three color options



The one with no color saturation

This is my favorite one! Since we already use three different colors, I feel we do not need saturation

Not as aesthetically pleasing compared to the others

This one is the easiest to understand

Colors are easy to understand and compare

Very easy to understand. Understood it within a quick glance



The one with different shades of green

Found the different colors in previous indexes easy to understand. Just green takes more time for me to understand

This one looks a little confusing. It's difficult to tell which shade is negative. It is easy to immediately see that red is bad and green is good

When everything is with the same color it's more difficult to compare different options quickly

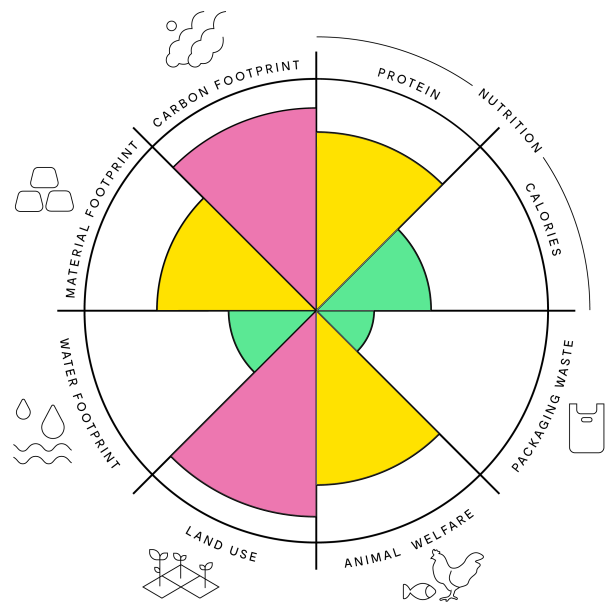
I like the different colors more. It makes it easier to see the differences faster.  
· What is the bad in this?  
·

Different shades of green makes it look so green! I feel I am being 'green washed' when reading this

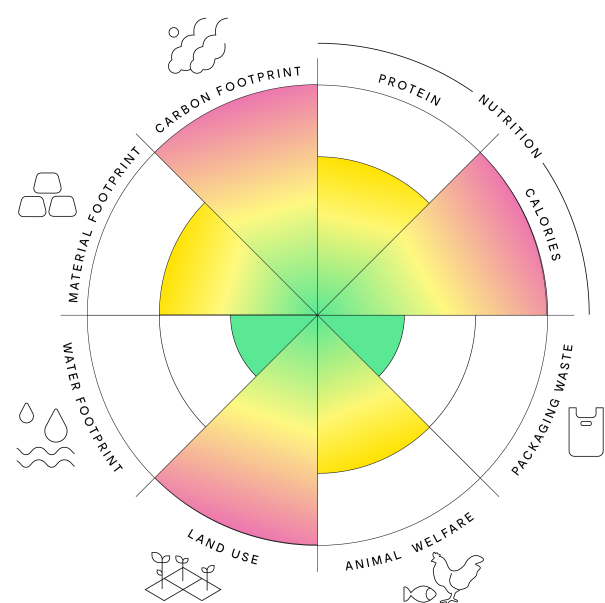
it makes me feel appreciated for eating no matter what I choose. That is not true in reality. So, I prefer having different colors



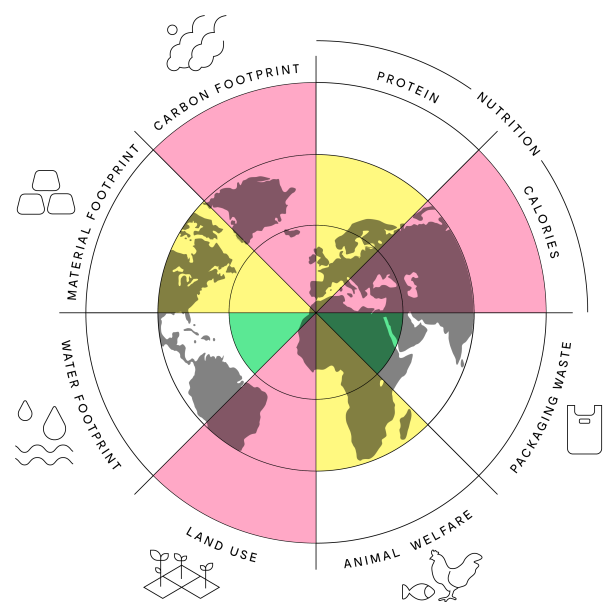
# New ideas from the participants



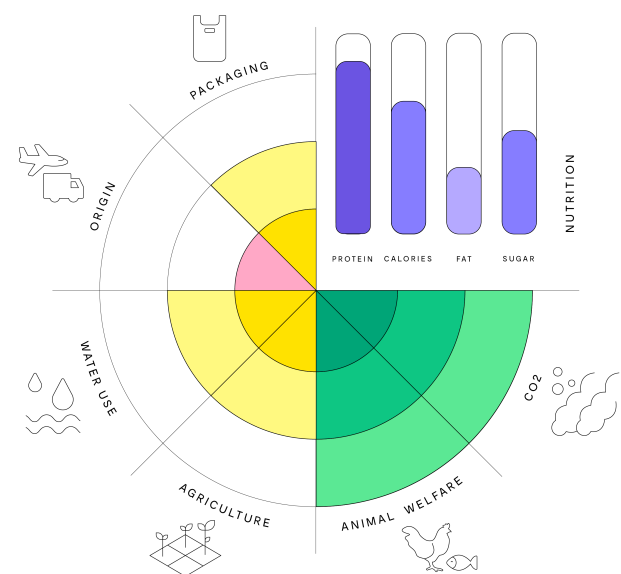
The one where there is only suggestive demarcation of red, yellow, green



The one with color gradient to demarcate the impact



The one with earth between green and yellow to show the safe consumption area



The one with more elaborate nutrition index



# Key Findings

Visually most participants found the index to be aesthetically pleasing. However, there were several factors that made the index counterintuitive and confusing. One of the commonly noted frustrations was the different shades of red, yellow and green. Participants also felt confused about the increasing and decreasing impact in regard to each variable.

Participants found the depiction of nutrition a bit unclear. As one of the participants stated, “if I understood correctly the calorie index goes red if there are too many calories? This doesn’t seem very intuitive especially while the protein goes red for too little protein.” In response, someone suggested having the nutrition bar to be expended to other contents and then making their levels of markings based on the recommended guidelines.

06

# Aim of the session

To introduce participants to tokens

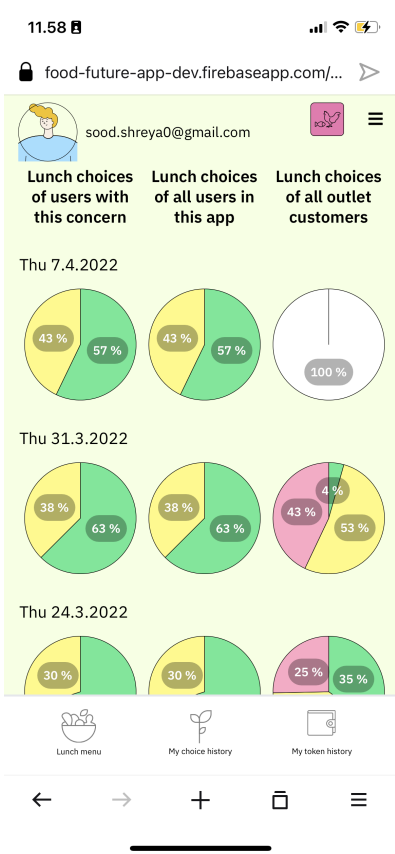
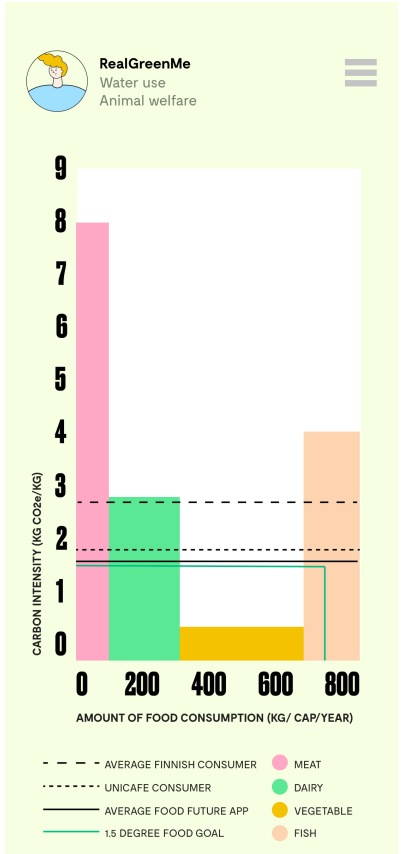
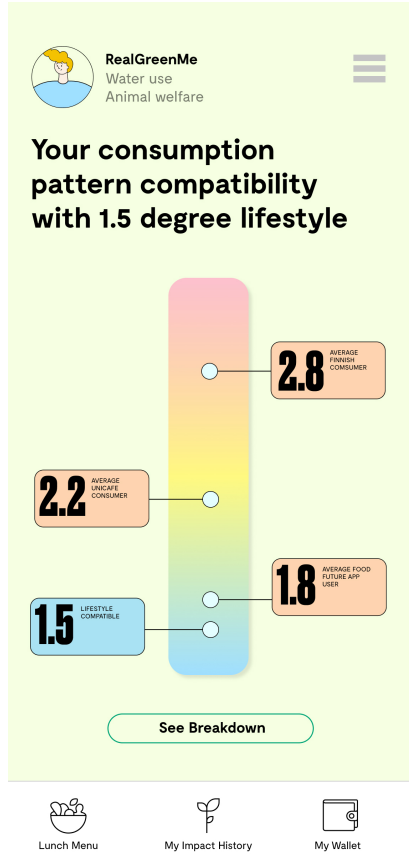
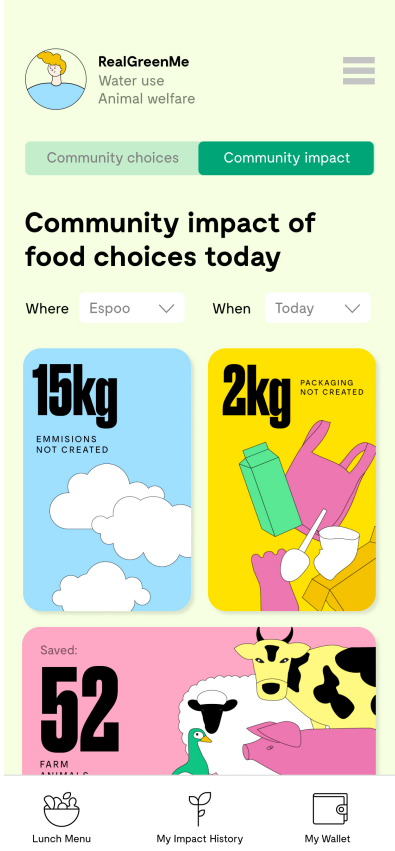
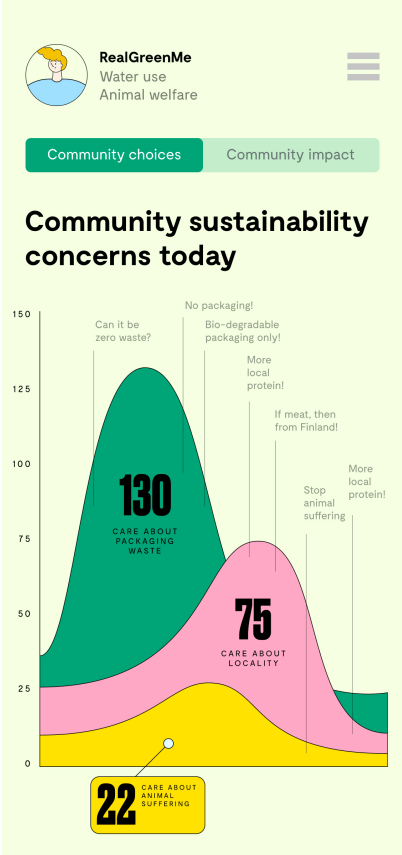
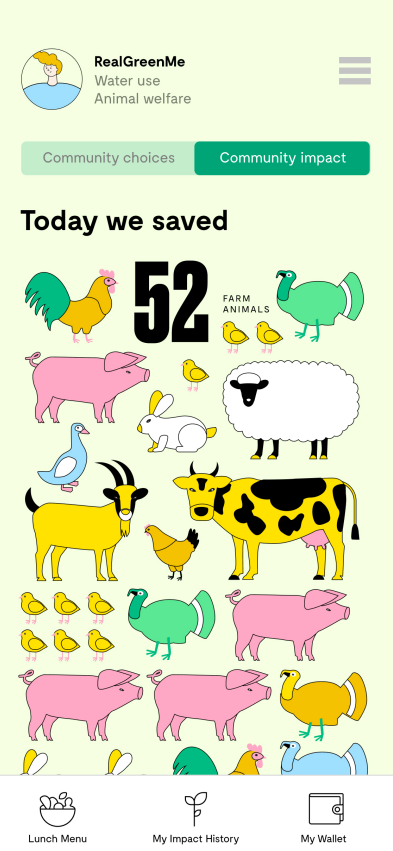
To understand the motivation to earn tokens

To gain feedback on the most influential impact visualization

## Activities

The same activity format of ‘Yes, not quite sure, how about?’ was used to get feedback on impact visualization, and cryptocurrencies as a way of building community

# Variations of Impact Visualization

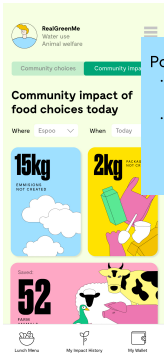


# Activity on Impact Visualization (1)

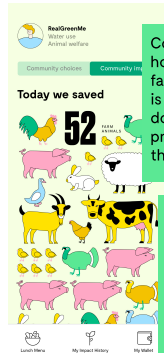
Yes!

Not quite sure!

How about?

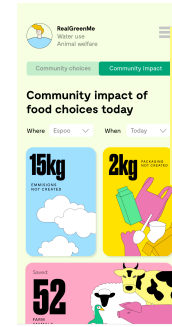


Positives:  
• A lot of detailed information  
• Positive impact made is clear to see

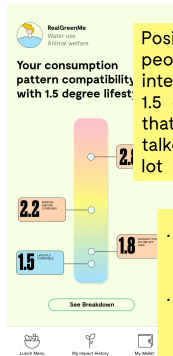


Confused about how the amount of farm animals saved is calculated. How does eating dairy-products effect the numbers?

It is nicer to have this information visualized more compactly instead of on a full screen view



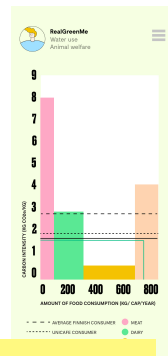
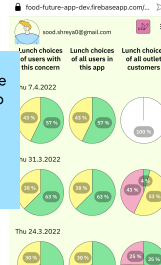
Could the 1.5 lifestyle 'meter' be added to this page? (problem with cluttering the page)



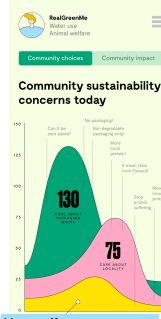
Positives: a lot of people might be interested in this 1.5 degree goal that has been talked about a lot

• Information is not as detailed  
• Easy to understand

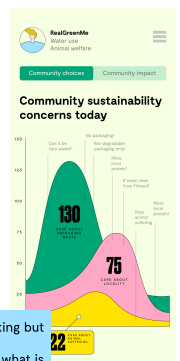
Data is important and understandable but takes a while to read and understand. Not very intuitive and seems visually a little cluttered



Not very intuitive. It takes some time and effort to understand the graph

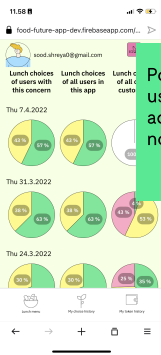


Unsure if concerns visualized are the choices in app or choices when selecting food. Also unsure if short phrases are examples or some sort of measurement. Visual is nice and understandable 'in height'



This is good looking but has too little explanations. Eg. what is x-axis.

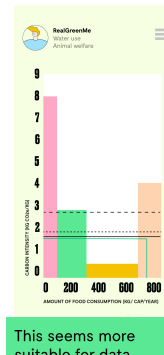
Overall good as it gives a sense of reliability and transparency.



Potential to be used as additional data, not on first page

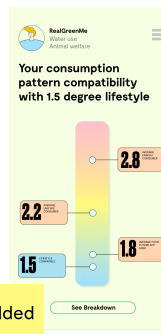


Very nice on first page

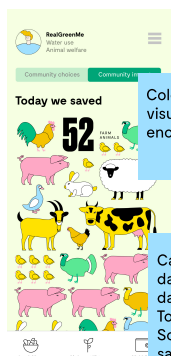


This seems more suitable for data analysis.

Need more explanation on what is carbon intensity



Could be added that it only includes CO2?

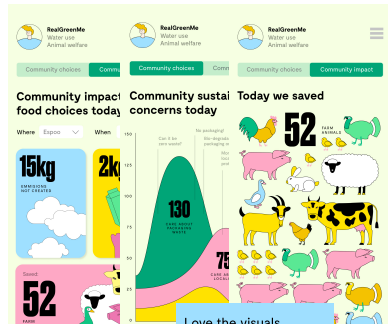


Colorful visuals are encouraging

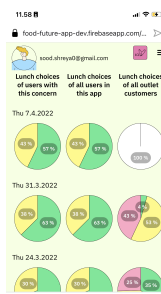
Can users see the data for several days? Today/ yesterday? So far we have saved...?

# Activity on Impact Visualization (2)

Yes!

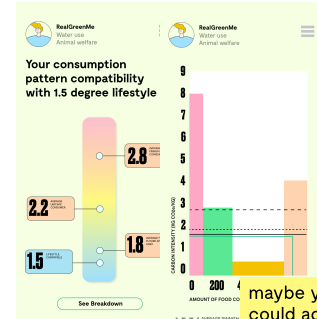


Not quite sure!

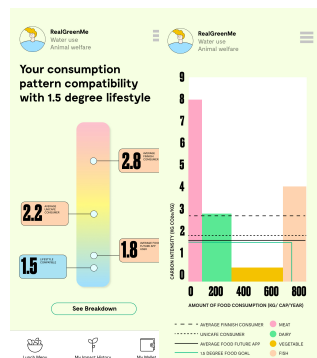


Took too much time to grasp

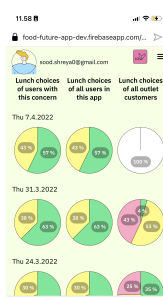
How about?



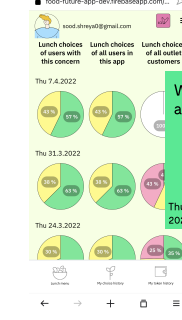
maybe you could add users own choice to this?



Most motivating was the possibility to compare

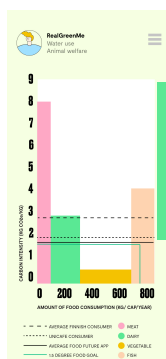
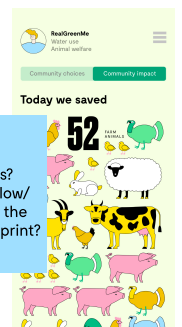


Takes a lot of time to read

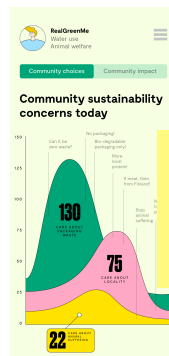


What is all three are combined?

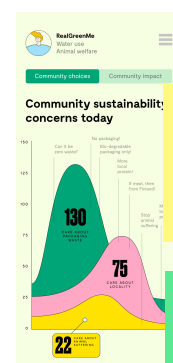
What is the meaning of different colors? Using red/ yellow/ green to show the degree of footprint?



Some background information would be needed

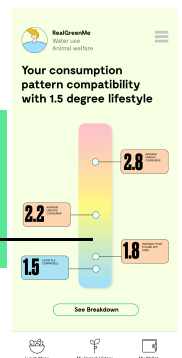


What does the x axis stand for?



Fill color is confusing. Line graph would be better.

What if x axis shows weeks



What is the level of the individual user was also indicated?

Your level

# Ideas presented for redeeming foodprint impact tokens

## Individual level

- Wall of fame
- Special desserts
- Earn a credit for consistent app-use
- Access to leftover foods by the end of the day

## Community level

- Community currencies: Currencies to empower community based actions. Student communities could be built based on their interests in sustainability concerns. Eg:
  - Baltic sea action for water use
  - EU's Reach regulation system for land use
  - Carbon action for carbon emissions
  - SEY for animal welfare in Finland
  - Great green wall for multiple concerns
- Community building based on cryptocurrencies: Being able to get connected with community members with similar values and motivations towards sustainable futures
- Participation rights (workshops, knowledge sharing)

# Activity on tokens

Yes!

I really like the idea of getting discount from left-over food

I think discounts overall would be motivating to me

I like the idea to have social function on the app. Eg. meeting like minded people and doing things together

Cryptocurrencies is quite an important issue

I could use the app if I was able to see data and got some reward. Food as a reward would be the best option to me

I could see myself using the app on a daily basis. I like the idea of being rewarded for continuous use of the app

I would like to have some discount, dessert on leftovers. I wonder if it is bad to motivate with food?

A learning opportunity that is currently not provided by universities. Eg. extra curricular

Concrete reward: left over food

If you could see a comparison of how many tokens you have and other app users have, it could encourage you to get more tokens. Like in a Game

Not quite sure!

We need a certain amount of users!!  
-How to promote?  
-Advertise?  
-Raise funds?

I think my willingness to volunteer really depends on the quality of the volunteering

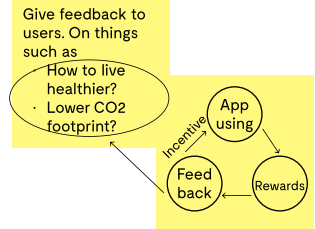
I think I do not have time/interest to get connected to like-minded people. Studies, hobbies, other medias take my time

Wall of fame: at least no names

What is the role of community empowerment?

Quick food rewards would likely be popular and liked. But do not work so much in community building

How about?



Cryptocurrencies are quite new to me but I can see their potential. Maybe in the future?

Socializing function  
· posting  
· more info

Maybe impact of coffee should be accounted for

More into cryptocurrencies

Concrete examples by lecture of what community empowerment could look like?



# Key Findings

Participants liked that the app gives them a way to look at their choices in a broader context than simply their preferences on any given day.

There were discussions on the criticism of using economic incentives to address climate change. However, if the focus is on rewarding sustainable choices to gain meal discounts, appreciation tokens were seen as a reasonable compensation.

From a social norms perspective, participants reported definite social pressure that they choose the most sustainable food, but they did not deem it as negative. In fact, they discussed the positive role of groups to encourage consumption of more sustainable meals. The data driven approach is seen promising to get climate change skeptics concerned about the impact of their food choices on the environment.

Participants also suggested compensation in the form of price reduction for public transport, access to discounted museum or exhibition tickets, or sports discounts to further the wellbeing of the app participants. However, being low-income students, participants did not seem inspired by tax benefits as it seemed too far in the future. To summarize, participants favored more immediate rewards over delaying the gratification for months or years.

The participants were positively influenced by collective impact visualization as they haven't witnessed it before. However, the statistics need to be based on an increased sample size, and over a longer period of time.

07

# Aim of the session

To improve the MOOC

To gain feedback on continuation of the application

To inform about the participation diary

## Activities

Feedback on workshops

Suggestion for future MOOC

# Feedback on Workshops

## Surprised

I was pleased how much participated exercises there have been

The balance between easy and educational

## Challenged

What does it mean by token?

Info on block-chain/ crypto confusing.

not sure how it applies to the Thursday class

I find it hard to apply what I learned on Tuesdays lectures to the workshop. Especially the information on crypto

I reflected on my opinions and where they were coming from. I challenged myself

Not knowing what we were doing in each session prior coming to class

Sometimes time ran up. It could have been better to be able to see the materials beforehand.

So you could form your opinion at your own pace

## Distracted

Running out of time

Lack of time due to covid

## Helped

Workshops were varied and interesting. There were different activities each time

Eating in workshops creates a relaxed environment and creates a sense of community

Good atmosphere.  
· How threshold to speak up/ tell your opinions  
· Everyone was supportive

Accessibility  
· You can choose between 2 times to join  
· Different ways of working - something for everyone

· Time spent for community building  
· Small groups  
· Visualization exercises  
· Non-hierarchical climate  
· Combination of drawing, writing, and talking

Visualizations helped make goals of the app more clear

Nice working environment

It was nice to meet the app developer and get answers to more technical questions

## Inspired

Different people from different majors show up interesting ideas

The workshop space was very suitable to be located in unikafe

Visuals of the app <3

International group of people

It felt like our opinions and participation was valued

Gather at Kaivopiha on a weekly basis and discuss with students from different fields

# Key Findings

A majority of participants wished for more basic information about cryptocurrencies and different theories. One of the students suggested having a more in depth discussion on clearly defining the role of cryptocurrencies in the project. This could also be included within the application for those who are more curious to learn.

For the lecture series, participants wished to have visiting teachers to go in more depth of knowledge from different disciplines.

Participants found it inspirational to study with a mixed group of students. They also enjoyed the unconventional approach of workshops in combination of venue of the workshops to be Unicafe conference room as this gave them an opportunity to be engaged in different creative thinking tasks.

# Key Insights

# Key insights of the workshops (1)

**App as an educative platform:** As the workshop series focused on gaining feedback on the lengths and breadths of the application, there was a unison among participants in seeking to have access to more detailed information about two main factors: First is regarding the interpretation of different variables that are accounted for in the index; second, for more transparency in data sources behind the index, and the method of evaluating them as red, yellow, or green. It was clear that the participants were interested in using the application as an educative platform to learn more about the environmental impact of food items.

**Appreciation and empowerment:** For vegan-curious participants, the index influenced rethinking their meal choice after viewing thier impact on various variables. The comparative indexes and the ability to validate their more sustainable choices made them feel empowered about being able to make a positive change. On the other hand, for those who are vegans due to environmental or dietary reasons, there was a sense of being appreciated for their default choices. One of the participants said, "It makes me feel like my choices do actually matter. Seeing the sustainability breakdown on the app helps educate me at the same time."

# Key insights of the workshops (2)

**Comparative insights:** While comparing different protein sources, the impact of milk products such as cheese was an eye-opener for many as concerning the CO2 emissions, cheese as a protein source came across as bad for the environment due to the high GHG emissions associated with it. They started to view the app as a source of new insights that questioned their assumptions regarding certain proteins. At the same time, vegans particularly demanded more elaborative comparisons between different vegan protein options, especially on the days when more than one vegan item is served.

**Nutrition management:** Participants were pleased to see the nutrition index of various protein items. While the vegan food items were green on most of the variables, they were a bit shy in the protein content. In order to overcome this, participants recommended the application have a pop-up suggestion that suggests the user opt for a bigger portion of beans at the salad bar. It was also widely recommended to extend the index also to the carbohydrates served because they make a significant portion of the meal and are the primary source of calories consumed.



# Key insights of the workshops (3)

**Future use:** Some users admitted that they would like to use the app as the primary platform to view the UniCafe daily menu. They also suggested that the app hold all the functionalities of the menu on the UniCafe website, like allergens, and the following day's menu. In the end, they said that they would like to have the app in all the Unicafe outlets and all the days, for their ease of use and to obtain a better understanding of their impact.

**Ecosystem development:** Participants also generated some interesting ideas as ways to encourage continued usage of the application. One idea was to have the indexes placed in the food serving aisle so that the information has maximum outreach. Secondly, some participants also suggested having the validation QR code on the tables or while exiting the premises, so that they could validate their meal in a hassle-free manner.

# Key insights of the workshops (4)

**Redeeming the tokens:** By and large, the participants liked the idea of either discounts or to get access to leftovers. They also suggested having options to have discounts on sports facilities to ensure the overall well-being of students. At the moment, participants are more inclined to redeem instant rewards that are more individualistic. The primary reason for being unsure about the community-driven activities is the prediction that it would need a lot of time to build a substantial community of food future app users. And even if this happens sooner, participants admitted that being a part of community benefits such as volunteering, and activism would be subject to their time availability and level of inclination for the cause.

**Defining social norms:** Participants hypothesized about the kind of social pressure the app would create if it were to become popular as it would make a larger group aware of the environmental impacts of different meals. Many agreed that it may not necessarily be a bad thing, since it could mean that people choose more sustainably-sound options. One participant remarked that “I feel like an atmosphere where choosing to eat food with negative environmental impacts is not socially acceptable is something we actually need.”

# Key insights of the workshops (5)

**Fair token system:** Participants consented that tokens should be explicitly used from the perspective of encouragement: if one's food choices are not at the desired level, one shouldn't be punished and e.g. left completely out of tokens. However, more tokens should be given for more sustainable food choices. Therefore, confirming the need for two types of tokens— participation tokens, and foodprint tokens.

**Future implications:** Some participants feared of a system like this would risk widening the social gap between environmentally conscious and skeptics since the former would certainly be gaining reward incentives by participating in this. On the contrary, some other users even suggested expanding the Food Futures app to supermarkets, and other restaurants.

## **Cryptocurrency and other skepticism:**

Participants admitted a lack of knowledge about how 'power hungry' cryptocurrency technology as the remedy of reducing distress on environmental impact. While they did not suggest blocking it out as a solution but consider further exploration into less resource-heavy technology and communicating transparently about it. Another skepticism that surfaced during the workshops emerged from the scope of users validating the most sustainable option on the application but selecting other options.

# Summary

To summarize, it could be concluded that users perceived the application to have a lot of potential to translate sustainability goals into actions. Many wanted to share the application with their peers who are curious about learning about the impact of their food choices at the individual and community levels. There was also a consensus that the app has a unique value of motivating participants to make consistent sustainable choices as it accumulates purchase history for a wider period of time and encourages eating in a climate-friendly way.