ATARCA

ATARCA Newsletter 4/2022: Special Edition!

The Food Futures use case is one of our three pilot experiments, testing the impact of anti-rival mechanisms on behavior. This case aims to encourage sustainable choices around the food we consume. This special edition of the ATARCA newsletter was prepared by the students working behind the scenes of the Food Futures case.

Food Futures: Enabling Sustainable and Informed Food Choices - March to May 2022

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The ATARCA Food Futures project, hosted at <u>Comnet, Aalto University</u>, addresses the current widely recognised market failure and tragedy of the commons within the field of agricultural production that contributes to the climate crisis, biodiversity loss and the rise of social inequality. The Food Futures use case aims to create a blockchain-driven digital ecosystem to empower virtual customer communities to make more sustainable food choices in the context of student cafeterias in Helsinki. It is designed to generate two forms of anti-rival goods: data sharing and positive externalities, helping communities to better manage resources. In this use case, anti-rival tokens are allocated as a measure of contributing positive externalities toward a more sustainable planetary ecosystem. These constructive individual actions would otherwise seem negligible: no single person can green the commons through dietary choices.



Daily lunch choice statistics

Outlet: unicafe kaivopiha V Concern: CO2 V







The Food Futures project works within the current market of student cafeterias. The market interactions remain as before, but by introducing a Food Wellbeing and Suffering index greater food system impact data transparency is provided. The visualisation and communication of different food items' impact helps customers to make more informed decisions, and is further enhanced by the visualisation of community impact. Our research using service design methodologies already has helped to recognise that sharing this information with users can generate a positive feedback loop that encourages increasingly socially constructive actions.

Two types of tokens have been issued: the History token, which is issued after every meal purchase validation, and the Impact token allocated reflecting sustainable meal choices by the customer community. The Impact tokens are created to measure, record and reward reduction of negative environmental impact. The shareable, nontransferable, non-fungible blockchain tokens are developed within this pilot use case experiment and they make possible the identification of users' action changes contrasted against actions of noncommunity members. Our initial Food Futures use case experiment indicates the first findings of sustainable consumption choices for the app users, as illustrated in the image to the left.

In practice, the Food Futures use case has been launched and the digital ecosystem (app) was tested at <u>UniCafe</u> Kaivopiha together with a pilot MOOC student group studying Sustainable Consumption at the University of Helsinki. There has been a series of seven focus groups, for the group of twelve students, taking place every Thursday, from 17 March through 5 May. The focus groups have explored the topics of blockchain technology as an empowerment tool for communities to make more informed and sustainable decisions; tokens as an empowerment tool, incentives and means of sustainable action recording; and the app, the service design and the index design UX/UI testing. We anticipate running the second round of the experiment in the fall of 2022.

Preview the Food Futures App



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