

ENGAGEMENT

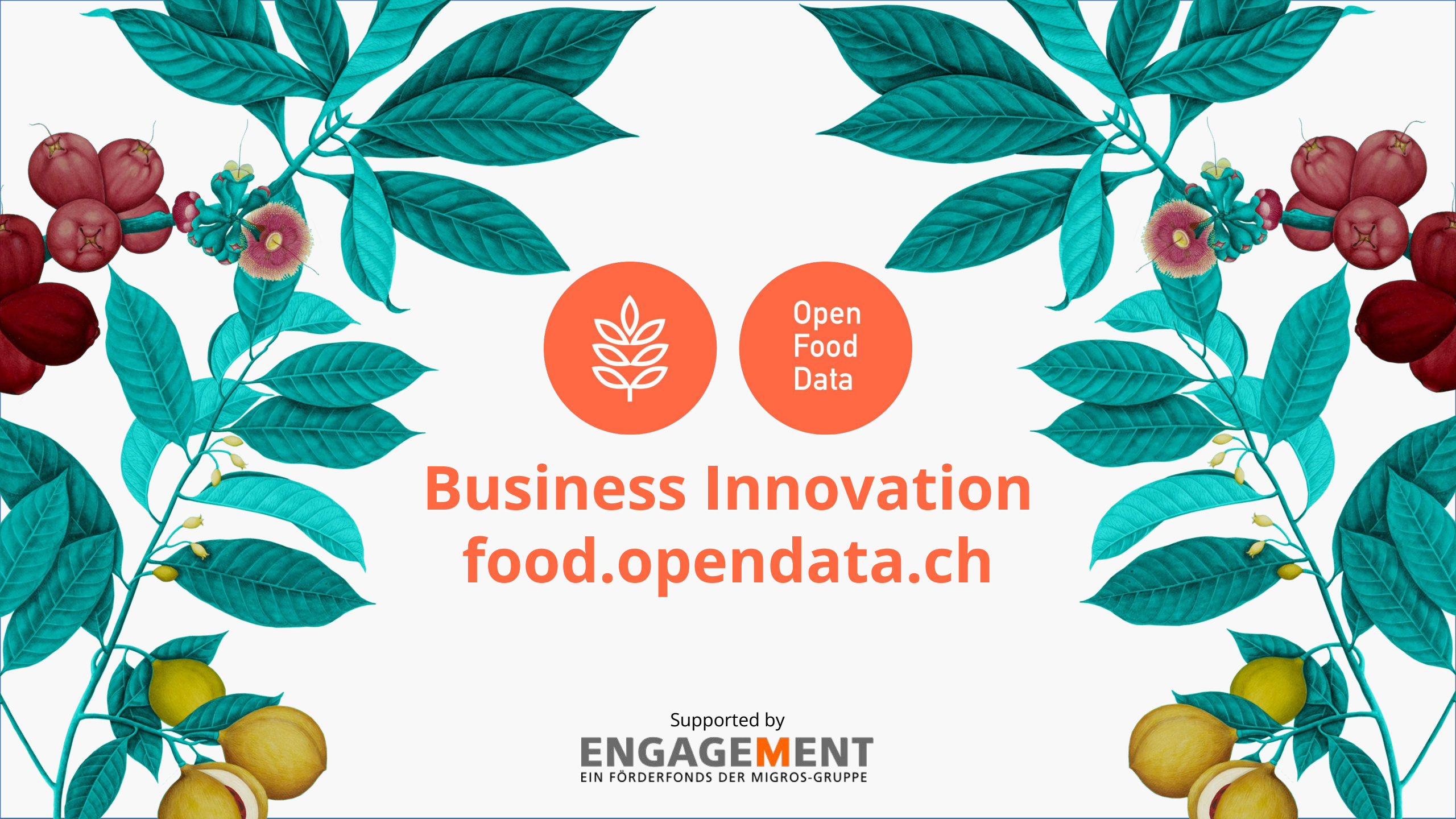
A DEVELOPMENT FUND OF THE MIGROS GROUP


WELCOME!

Open Food Data Hackdays

Opening & Challenges | Team Building | Hack | Project Pitch

09.30	Welcome & Intro to Opendata.ch – Hannes Gassert, Opendata.ch
09:40	Sustainable Living Lab #1 - Food Save Challenge
09:44	Land2Door #2 - The Link to Local Food Access
09:48	Ambrosus #3 - Track the Food Chain
09:52	SwissDecode #4 - Digital Detection of Milk Fraud
09:56	Prognolite #5 - Help Restaurants to Save Resources
10:00	Agridea #6 - Foster Local Sourcing
10:04	Meal-Good #7 - Meal Good, Feel Good
10:08	SHARP #8 - Strengthen Farmers' Resilience
10:12	Snaq #9 - Plate Size Matters
10:16	MassChallenge
10:20	Open Mic - in case you feel inspired!
10.35	Kick-off – Nikki Böhler, Opendata.ch



Business Innovation
food.opendata.ch

Supported by

ENGAGEMENT
EIN FÖRDERFONDS DER MIGROS-GRUPPE

WHAT..
BUSINESS
INNOVATION





WHAT..
FOOD





WHAT ..
OPEN DATA






Let’s get ..


Let’s get
challenged!



Sustainable Living Lab:
Food Save Challenge

#1

The Problem

Switzerland wastes 2.3 M tons of food per year; costing 64.5 M francs in disposal costs.

The total food waste in the Lausanne region is 86'000 tons per year, 60% of which in the production & consumption stages of the food chain.

SDG target 12.3 aims to reduce food waste by 50% by 2030.



Open Food Data

Roughly 1/3 of food produced for human consumption gets lost or wasted



1.3 billion tons per year

The Data



A food flow map illustrating the different production, distribution, conversion, valorisation and waste channels provides baseline data covering all stages of the food chain.

Access it here (or actually: join our team).



The Potential Solution

Solutions exist for each stage of the food chain, but the best ones will tackle the channels through which the most waste occurs:

***production** and **household consumption**.*

From the systematic use of ugly produce to a new design of food storage at home, from a totally new concept or the local replication of a proven concept abroad, any idea is good to help us achieve our goal: decrease food waste by 50% by 2050.



About us

Sustainable Living Lab

Vie Durable

IMPACT HUB

ENGAGEMENT
UN FONDS DE SOUTIEN DU GROUPE MIGROS

Incentive

*3-month CONNECT Membership**

**worth CHF 405*

IMPACT HUB Lausanne

Workspace

Network

Inspiration & Resources

https://news.nationalgeographic.com/news/2014/10/141013-food-waste-national-security-environment-science-ngfood/

https://wastelesssavemore.sainsburys.co.uk/projects

http://www.fao.org/docrep/018/i3342e/i3342e.pdf

http://www.fao.org/docrep/018/i3347e/i3347e.pdf

http://foodwaste.ch/

https://www.slideshare.net/bakeralan/fwra-toolkit-final0415141

https://drive.google.com/a/bsl-lausanne.ch/file/d/0B5s9Ma-dEBwXaGdBSGdzZ25NY3c/view?usp=sharing





Contact

Let's halve food waste in Lausanne by 2030!

Erica Mazerolle
Lead & Catalyst
Sustainable Living Lab

erica.mazerolle@impacthub.ch

#1





Land2Door:

The link to local food access

#2

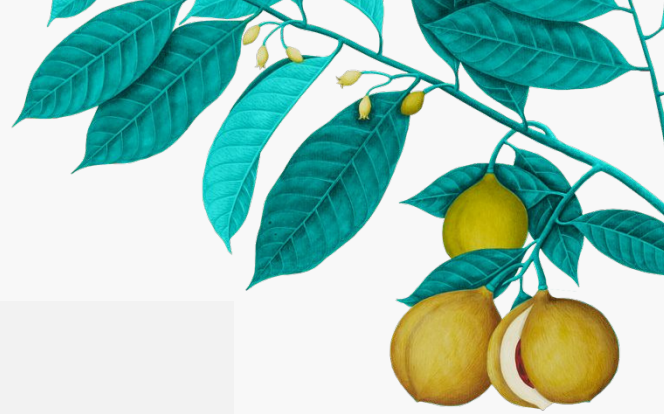
The Problem

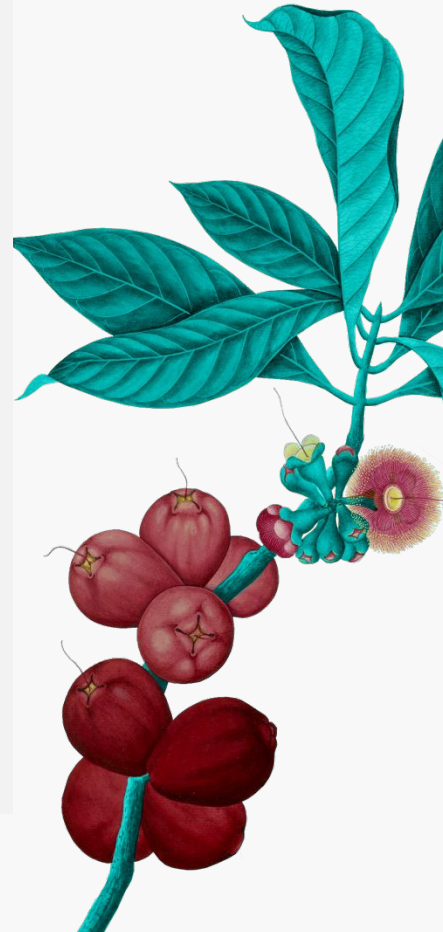
What about local food producers…

- Today there is **3600 farms** in the **Canton de Vaud.**
- **The Farm # dropped by 23%** in the last 10 years.
- **20%** of the farms are using **direct distribution channel** & only **2% of vegetable** are sold via this channel.
- Direct selling is heavy for farmers already working 70hrs a week.

What about consumers…

- They are requesting direct selling
- **The direct selling** model is named as the future guarantying **quality and traceability**.
- **Lack of information** on local producers is the strongest **barrier for broader adoption.**





The potential Solution

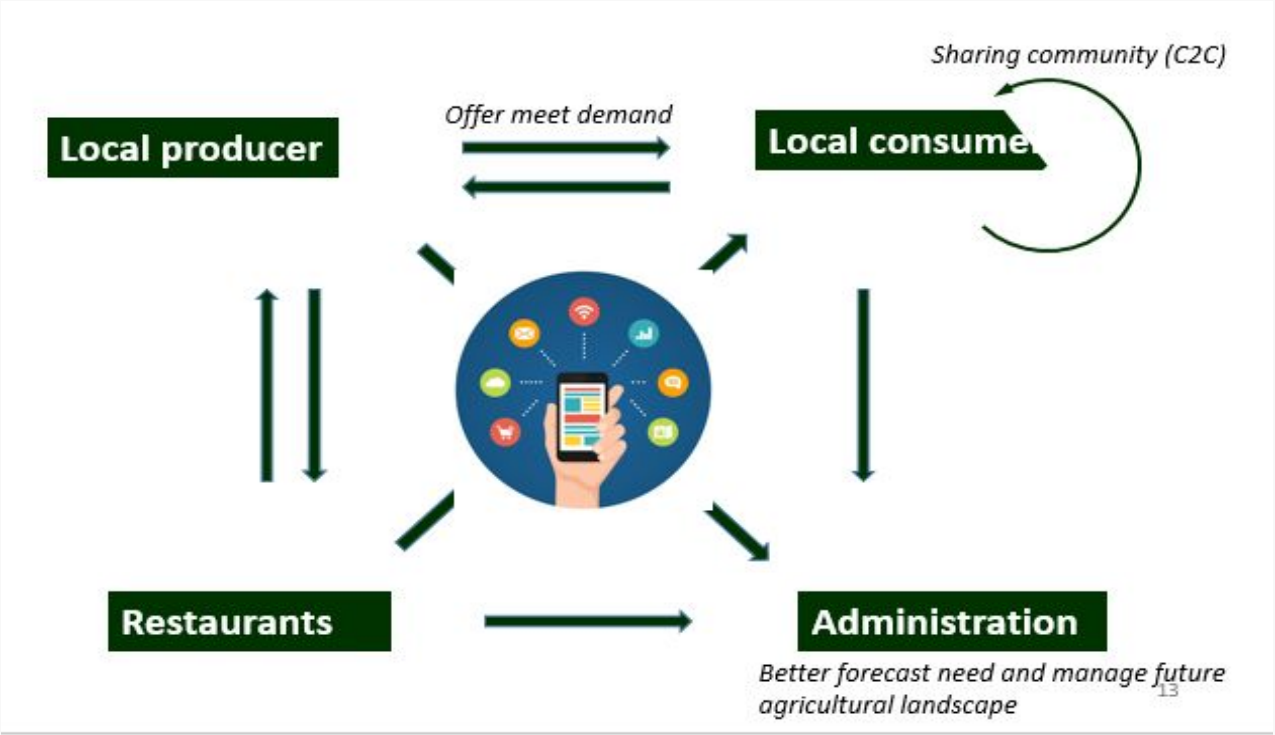
Build data on producers & open this information to consumers to develop the direct selling model in Switzerland.

1- Build a collaborative and comprehensive open database mapping information on local food producers & direct selling points.

2- Create service opportunities to drive local food choices and purchases via direct distribution channels.

The potential Solution

Simplifying local food access for a sustainable and ecofriendly model



The Data

We developed an initial interface to collect data through forms, building on the web scraping prototype at the 2017 Open Food Data Hackdays.

- ➔ *Initial listing of local producers & direct selling points in Canton de Vaud developed.*
- ➔ *Drafted the data requirements & schema to build a database*



About us

"Willing to make food accessible, environmentally sustainable and responsible".

"Food is also about pleasure, socializing and traditions. Local food products bring all these dimensions".



Aurélie Barberis
Food scientist, project manager



Rémi Tognet
Food Engineer

"Passionate about local food made with the respect of the environment. Love to work & interact with farmers".

Incentive

We aim

- *To build the most advanced data set on local food producers and direct selling points.*
- *Start piloting the interface in the next 2 months.*
- *Raise awareness & extend our network to fund our project.*

We need

Web page developers, graphists, programmers, local food enthusiasts to grow the «manger local».

...Join us !

Contact

The link to local food access #2

Aurelie Barberis
Founder
Land2Door

aurelie.besson@icloud.com

Rémi Tognet Bruchet
Founder
Land2Door

rtognetb@gmail.com



Blockchain for Trusted Product Traceability

#3

The Problem

The public is losing trust in labels such as “Fairtrade”, “Organic”, “IP Suisse”, “Le bourgeon”, etc. as very little data is available to consumers.

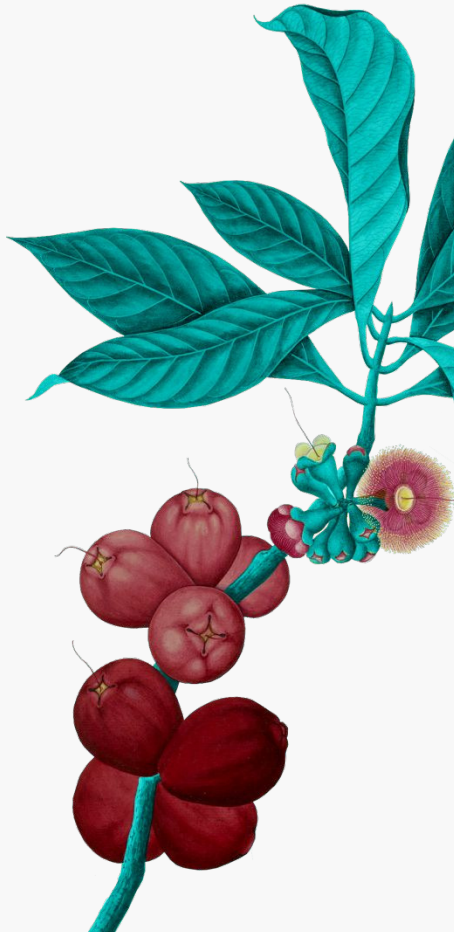


The potential Solution

*We will provide you full access and support to **Ambrosus Network** which is a decentralized blockchain-based ecosystem to store and share origin and traceability information about individual products.*

More infos: dev.ambrosus.com

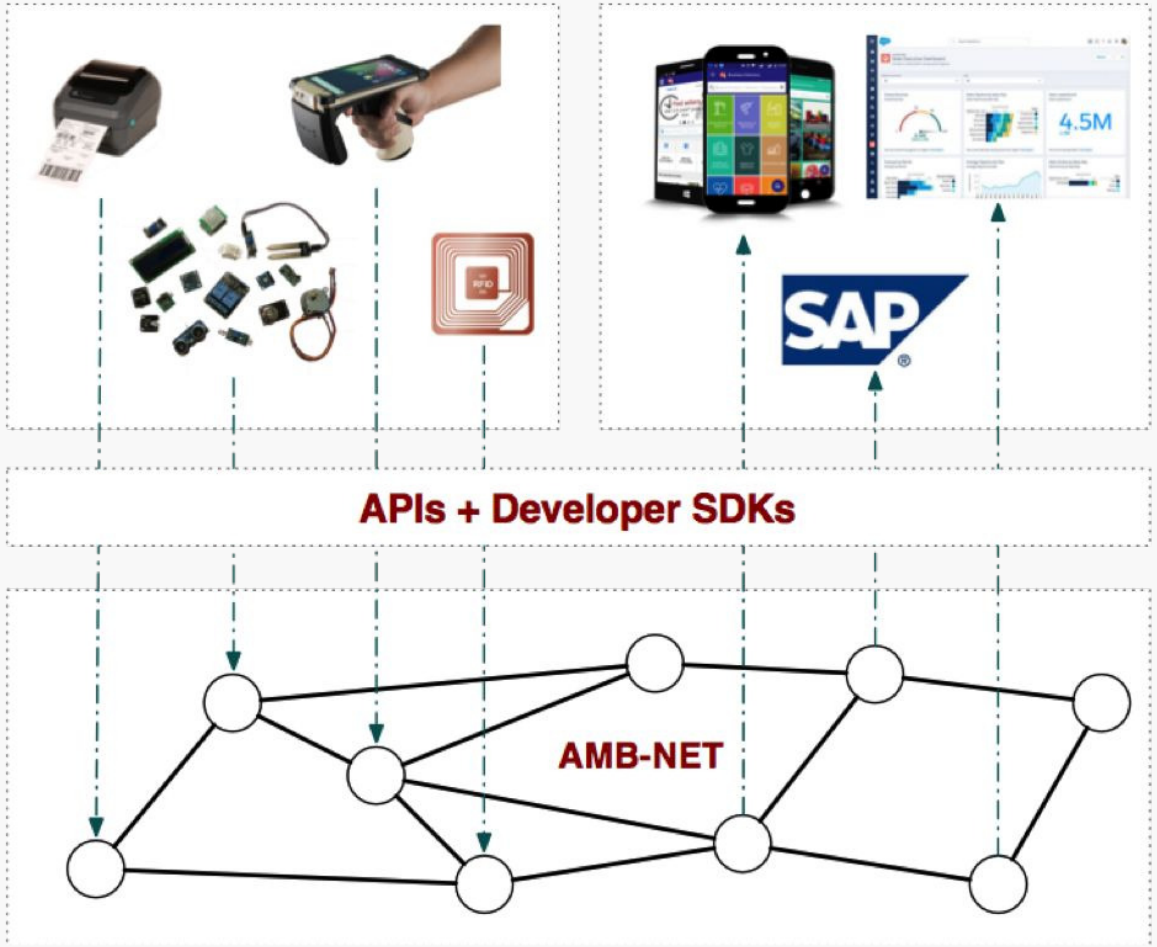




Open Food Data

Data Collection

devices, sensors, printers, etc.



Data Sharing

ERP Integration, dashboard, field & consumer apps, etc.

Data Management

User/app/device authentication, digital ID storage & serialisation

Winning Team



Prize:

- *Invited to improve their solution to a fully functional*
- *Potentially with operation with one of our customers*
- *In the form of an internship / paid project.*

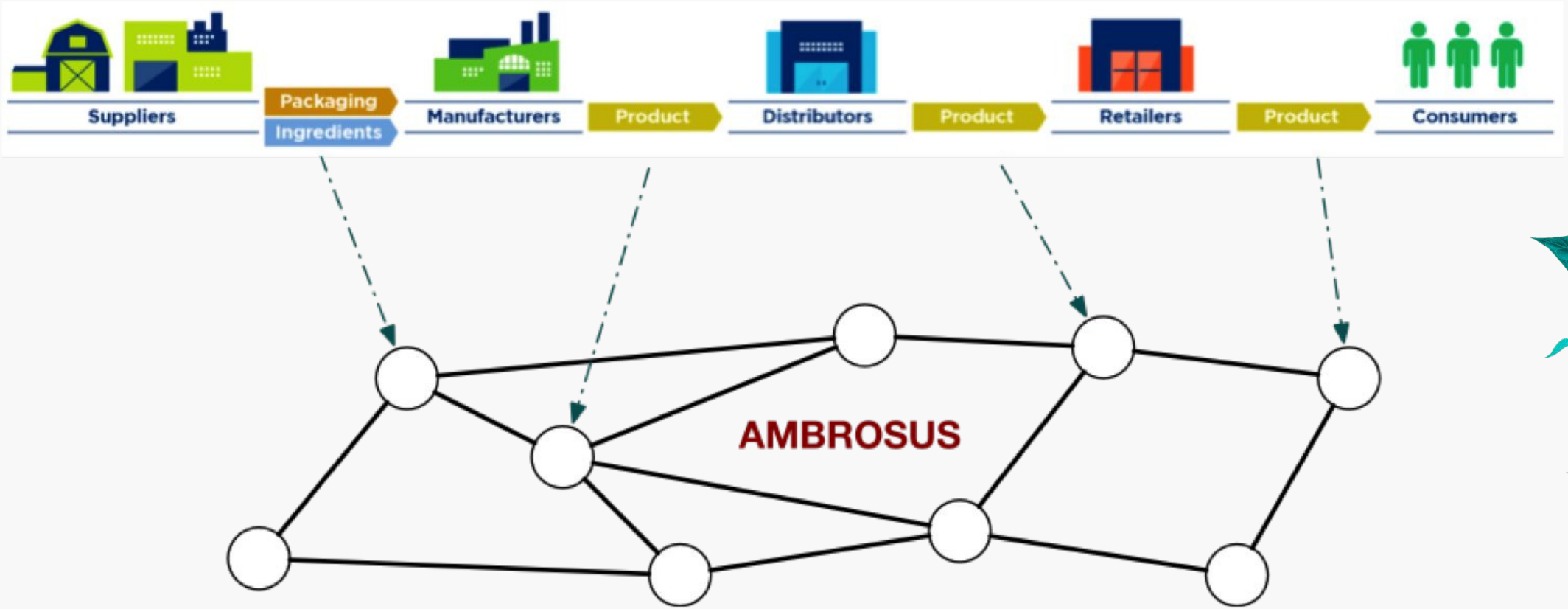
We will provide:

- *Funding*
- *10.000 CHF*
- *Extensible to a larger project*
- *The technology, expertise, support, team*



API

Open Food Data



Account



POST https://network.ambrosus.com/accounts/verificationToken
POST https://network.ambrosus.com/accounts

Asset

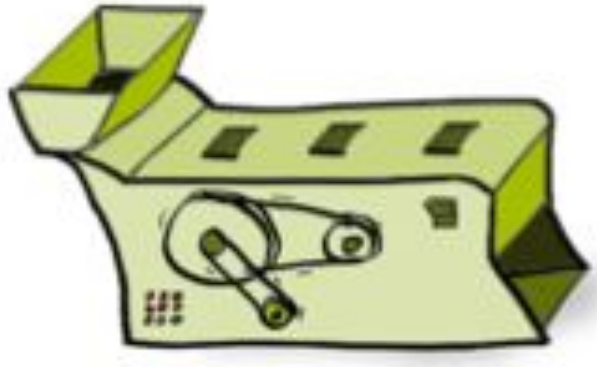


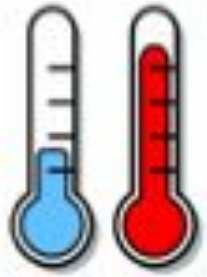



POST https://network.ambrosus.com/assets

GET https://network.ambrosus.com/assets/{id}

Event







POST https://network.ambrosus.com/assets/{id}/events

GET https://network.ambrosus.com/assets/{id}

Links

Documentation

dev.ambrosus.com

Dashboard

dashboard.ambrosus.com

API URI

https://network.ambrosus.com

Postman collection

https://goo.gl/MyNsEj

#3







SwissDeCode:

Digital detection of milk fraud

#4

Milk Fraud:

a Risk for the Dairy Sectors & their Consumers

1 liter of milk
+ dirty water
+ wheat flour
+ soy proteins

= 2 liters of milk

with extra Risks

94,200 liters of water in Swiss milk

Rheintal, 2017. NZZ folio nzz.ch/2017/dezember/der-milchpanscher

Risk:

Hazard Analysis and Critical Control Point



Operational Risk

Final Product does not meet Desired Specifications

Food Safety Risk

Final Product contaminated with Pathogens
Allergens
Gluten
Toxins

Case Example - Dec 2017

Salmonella in Lactalis' Baby Milk

Food Waste

11,000 tonnes of milk powder

Health Issues

35 cases reported in France
1 case reported in Spain
1 case reported in Greece

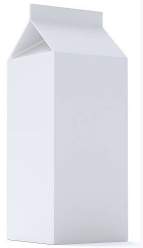
ONGOING RECALL in 83 Countries

DNAFoil MultiPlant

Multi-spectrum DNA test - on-site - 30 minutes







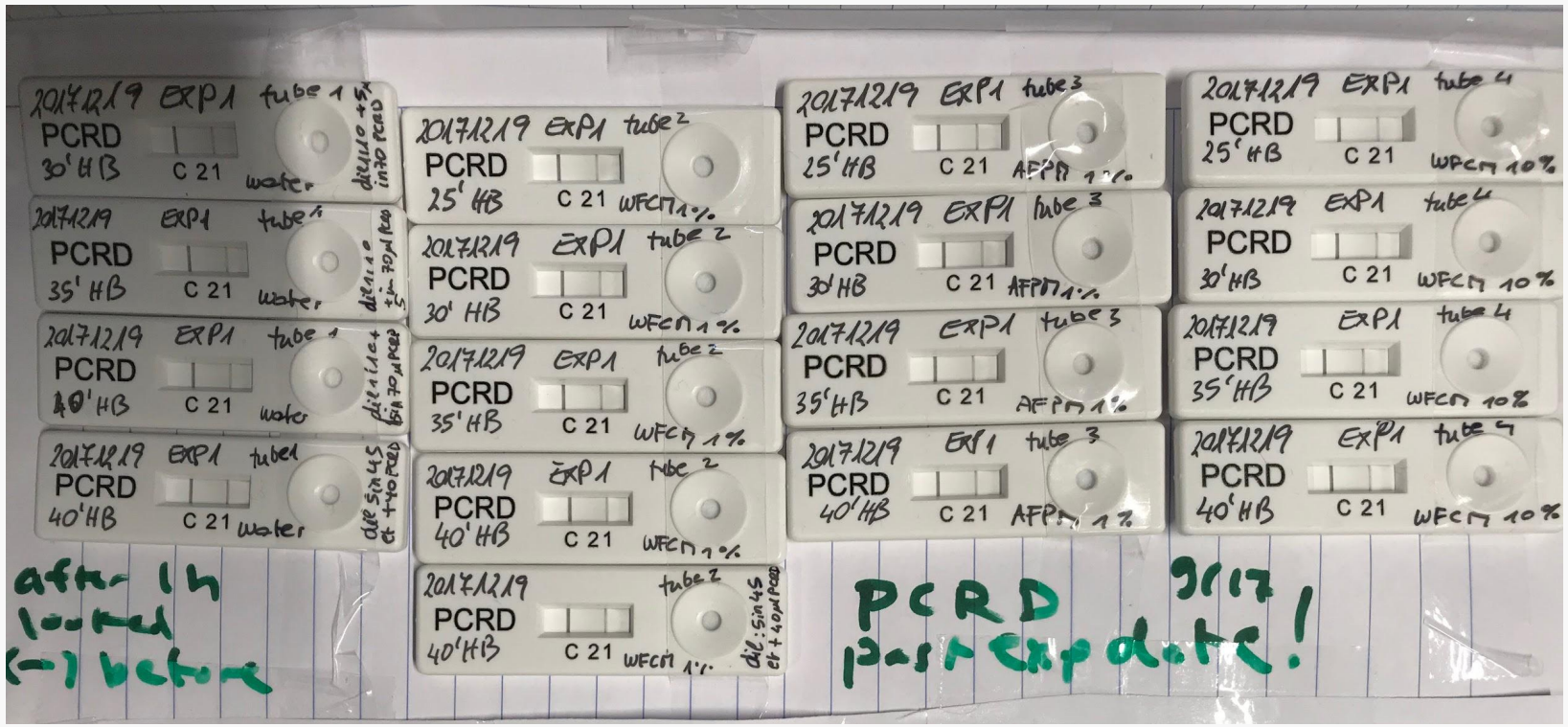
COW MILK
+ Wheat
+ Rice
+ Soy, … any Plant



COW MILK

~~Big~~ Analog Data!

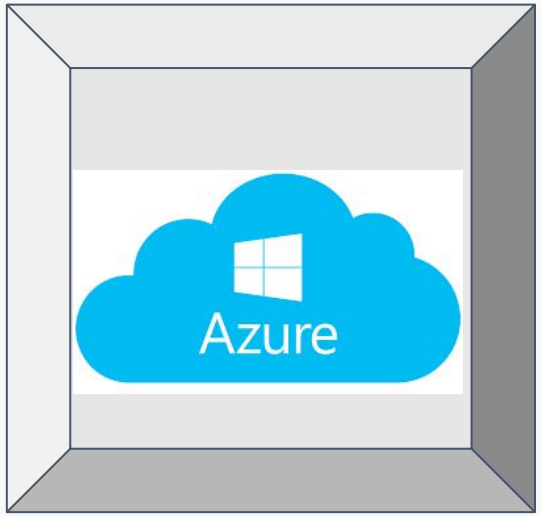
We wish to offer digital Integrity & Traceability



300+ Datapoints available. **+1 Point in 30 minutes**

Our Digital Roadmap

72 hrs



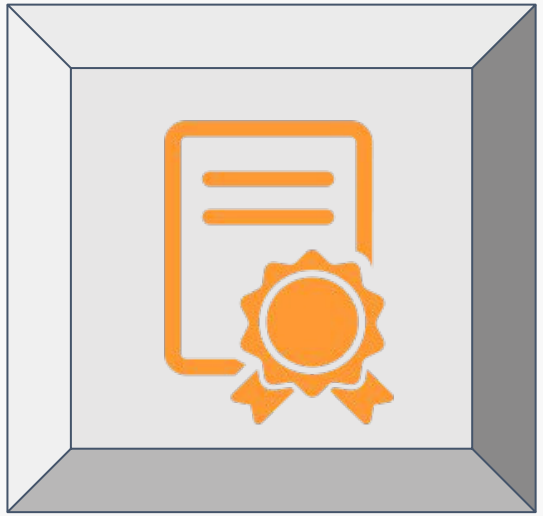
App Prototype

3 months



e-Device

2 years



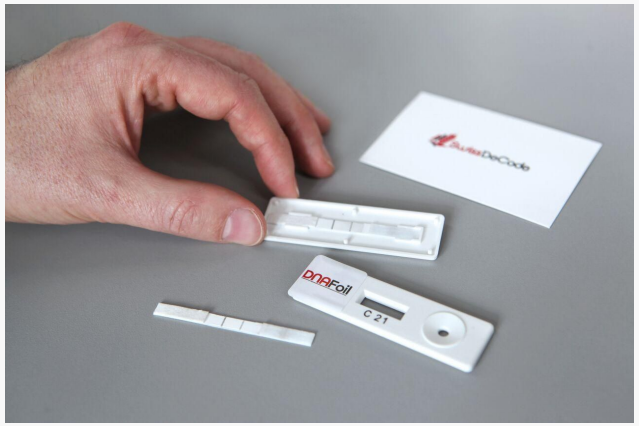
Gold Standard Certificate

We need: Developers, Makers, Bio-Hackers for Sustainable, Long-Term Growth

About SwissDecode

Food Safety & Compliance 24/7

Spin-off UniGe, 2016
CTI Label Acceptance
Revenue-funded



7 Ongoing Pilots with International Customers

We are for the Long-Term

Learn more about your Food
R&D Lab in Renens
Hacker-Culture

We love beer as well
Open Beer DNA Data with Hackuarium:
www.genome.beer/data



Contact

Digital Detection of Milk Fraud

Gianpaolo Rando
CTO
SwissDeCode

gianpaolo.rando@swissdecode.com

@swissdecode

#4





Prognolite:

Help restaurants to save resources

#5

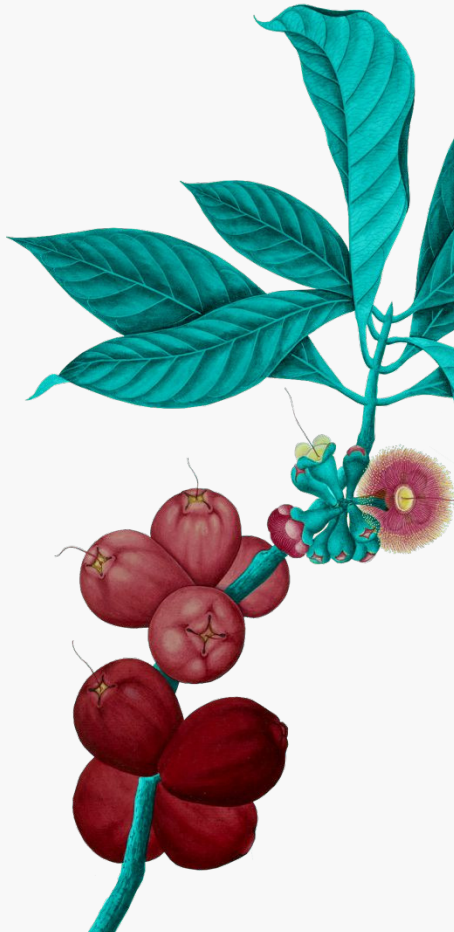
The Problem

Restaurants don't know the demand in the future

This leads to

- *a lot of food waste*
- *high personnel costs*
- *long waiting times*





The Data

To do the predictions you get the details from every single glass of apple juice or pumpkin cake which is sold by Jucker Farm.



Data: https://prognolite.com/hackdays

- *ca. 1.4 Mio sold articles in 2017*
- *Date/Time*
- *Article*
- *Price*
- *Amount*
- *Shop-ID*
- *& more*
- *survey with 2000 customers*
- *Weather data from meteoblue.com*

The potential Solution

- *Aggregate data to time series (e.g. 1h). Take weather data and dummy variables (e.g. day of week) and try to make your predictions for the week which is missing in the data. Use machine learning or other statistical methods. We'll present the daily turnover for each shop and make the raw data of this week available after everyone presented.*

- *Make beautiful dashboards or program a tool, which helps Juckerfarm to make product bundles with products which sell best together.*

- *Realize your own ideas*

About us

We’re a startup and want to get new ideas what to do with those Restaurant data and to find talents who we could work together in future.

Our Team:

- *Roman Lickel (CTO and experience in ERP and web development)*
- *Simon Michel (CEO and experience in electricity consumption predictions)*
- *2 Researchers from ZHAW (Statistics)*
- *2 Master’s Students from ZHAW and HSR*

Incentive

- *We give you access to the newest data from Juckerfarm (updated every 30min) through our API and you can check how your model performs in the future => just ask us for the API-key after the event*

- *We're happy to give you access to data for any Bachelor's, Master's or other thesis. => e.g. from ETH food courts*

- *This Summer we're looking for people who want to join our team*

Contact

Help Restaurants to save resources

Simon Michel
Co-Founder
Prognolite

simon.michel@prognolite.ch
+41 79 852 85 83

#5

Data: https://prognolite.com/hackdays



Agridea:

Foster Local Sourcing

#6

The Problem

Many buyers (retailers, restaurants) and private consumers in the leman region would like to buy more local food products for different reasons: development of CSR approach, sustainable development goals, local food trends and willingness to pay. However, raw and processed material is travelling through the region, in and out and the information on the local sourcing is being lost across the different processing steps.





The Data

Different studies and local food maps: different reports agridea.ch

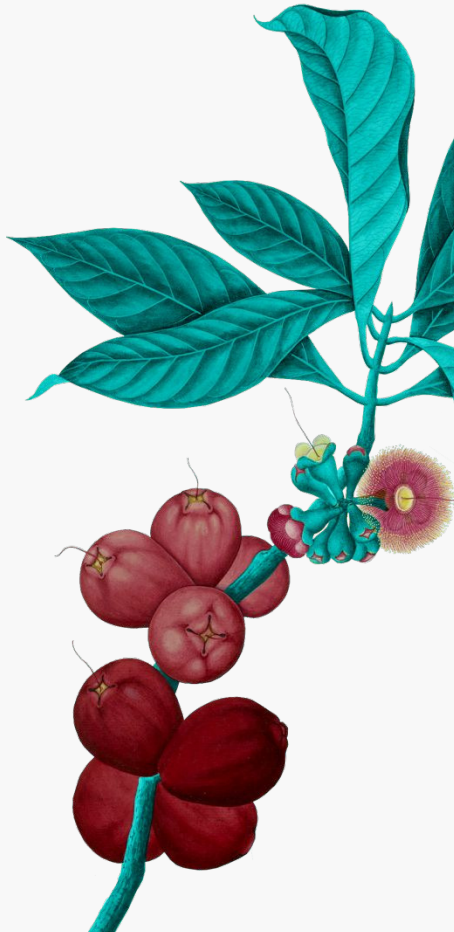
Producers cooperatives and collecting points: no data publicly available

Processing food units: no data publicly available

The potential Solution

A food data information system on local production in the leman region, in order to better trace the local sourcing as well as the different flows and, through transparency, foster local production and consumption.





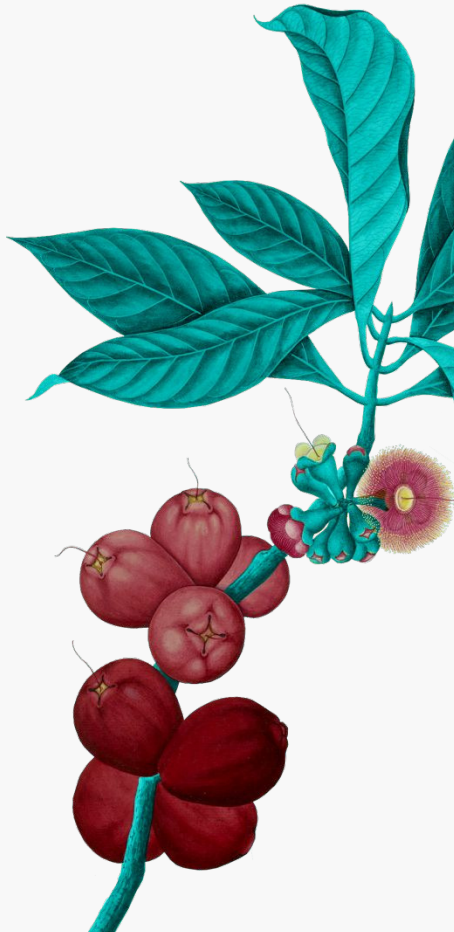
About us

French, since more than 10 years in Lausanne. MSC Political Sciences & development studies. I care because I think every human being needs to be rooted, and this can also happen through local food and through a better recognition of farmers and processors work in the society.
I'm not alone! Astrid Gerz and Nicolas Bezençon form the team with me and have helped me develop this idea!
And what is AGRIDEA?

Incentive

Get funding from the PHR Economy project for a pilot project to be supported by SECO (State Secretary for Economic Affairs), Canton Vaud, Geneva and Fribourg





Contact

Foster Local Sourcing

#6

Magali Estève
Position
Agridea

magali.esteve@agridea.ch





Meal Good:

Meal Good, Feel Good !

#7



Alice
Consultant, 31 years old
Single, Lausanne city

Eco friendly, local products, social

Healthy food, nutrition, tasty products

Like to cook

Not enough time to buy food

Missing recipe ideas

Left overs



Francois
Farmer, 57 ans
4 children, Cugy

Member of
the local cooperative

Take care of his production
and his environment

Irregular
demand

Weak
recognition of
product

Waste of non
appealing
products or
surplus

Saving waste by using residual local production



9,5 tons



45,6 tons





MEAL GOOD



Tailored **portioned** meal boxes



From **residual** local production

Open Food Data

Ethical eating by connecting local farmers to customers



Higher income

Recognition





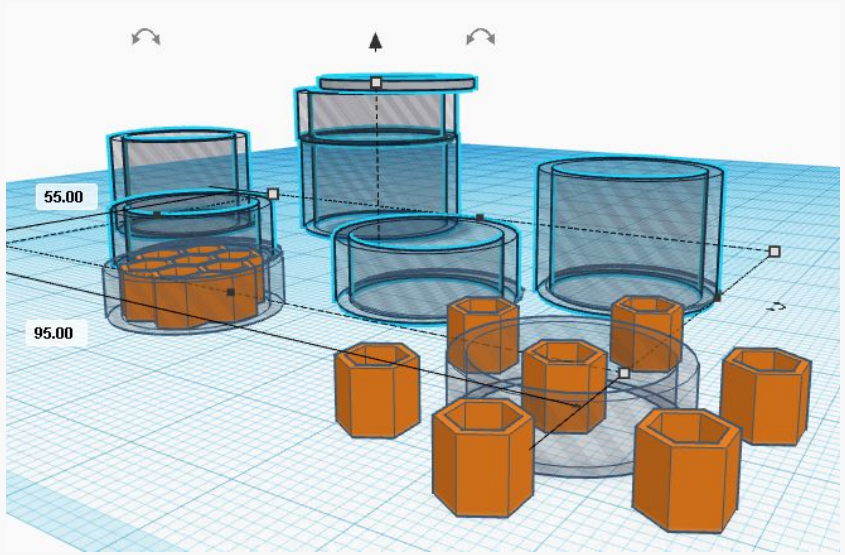
2.5 Tons



Convenience

Weekly healthy meals

Eco-Friendly Delivery & Packaging



100% Reusable
packaging





100 % e-transport & bikes

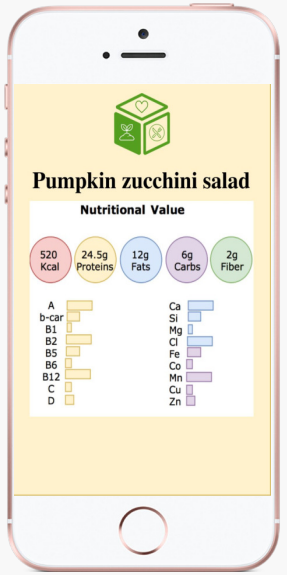
Customer interaction is important



Accurate
portion sizes



Creative
recipes



Nutritional
information

Team



PR & Marketing



Logistics Expert



Director & Software Dev



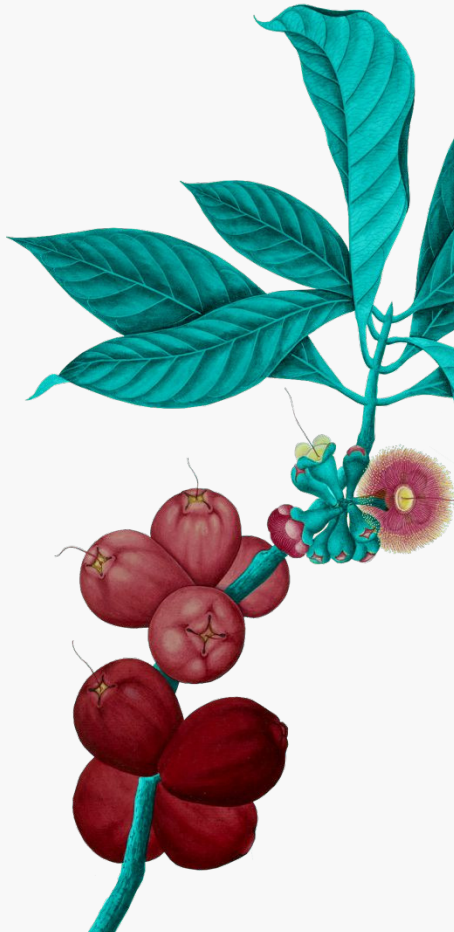
Product Designer

Where we are now?

- Finalists in Sustainable Living Lab @Impact Hub Lausanne

- Working on:
  - market study & business model.
  - Generating a Recipes DB around local production (Vaud and Swiss).
  - Forming the full team.
  - Prototyping our product.



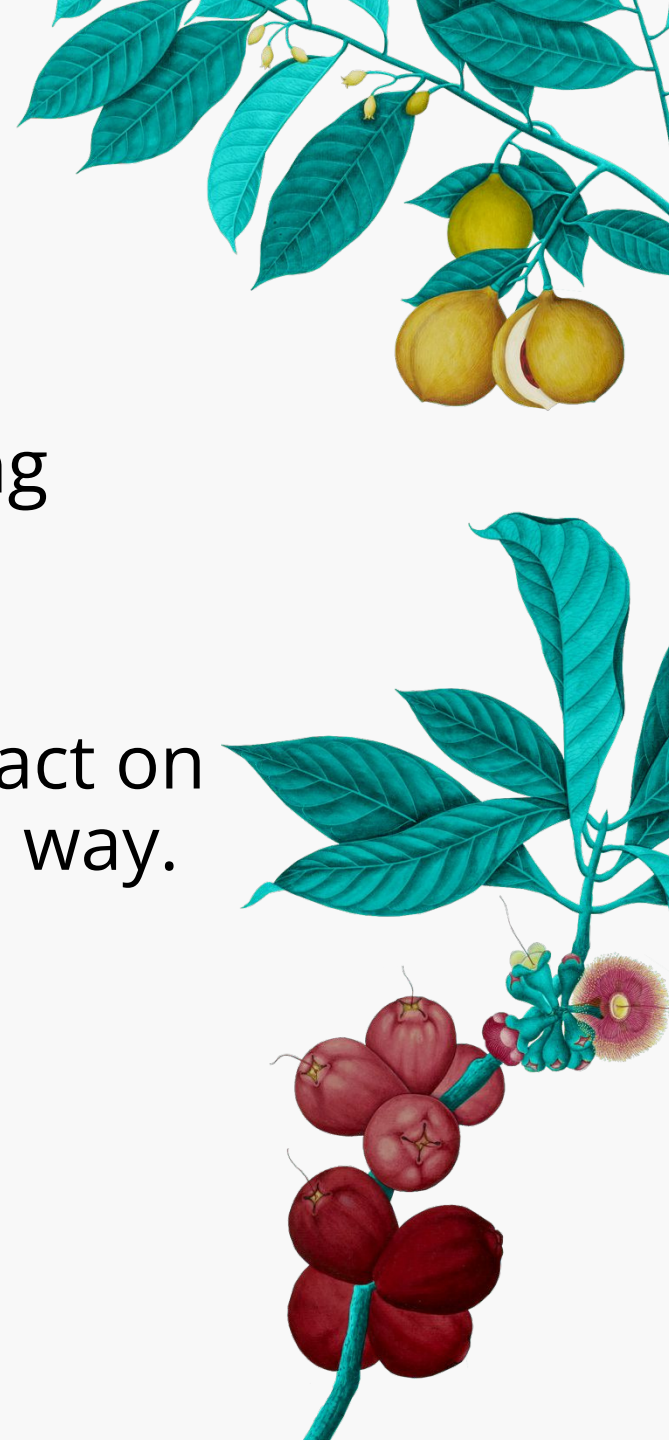


Why join us?

Help shape the way people develop healthy eating habits.

join a motivated team who wants to have an impact on how we eat in an ethical, healthy and sustainable way.

#7





SHARP (FAO):

Strenghten Farmers' Resilience

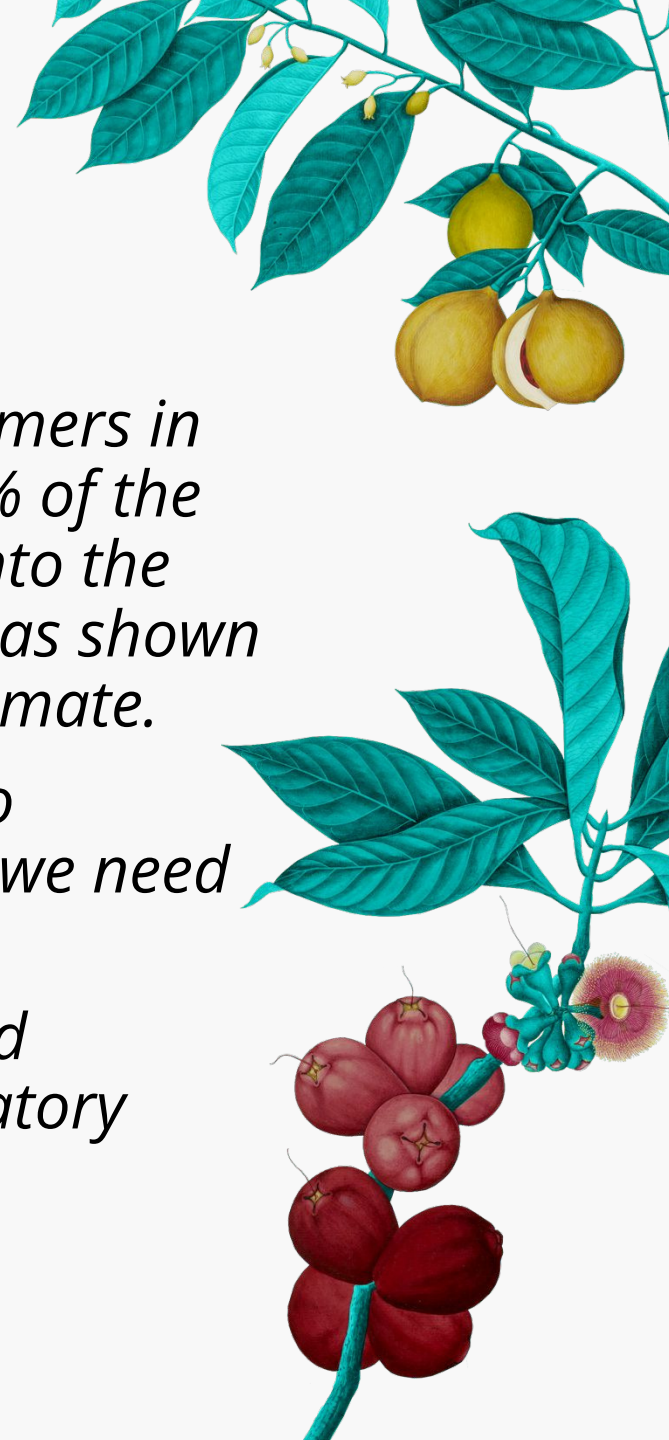
#8

The Problem

Climate Change creates huge challenges for smallholder farmers in developing countries. In sub-Saharan Africa, more than 60 % of the population is employed in agricultural activities. Research into the impacts of a changing and variable climate on agriculture has shown that by crop yields, are highly dependent on weather and climate.

Smallholder farmers often lack the resources and support to adequately tackle these threats. In order to empower them, we need find out what helps to make them more resilient.

SHARP is a unique survey tool developed by the UN Food and Agriculture Organization to measure resilience in a participatory manner, putting people at the center.



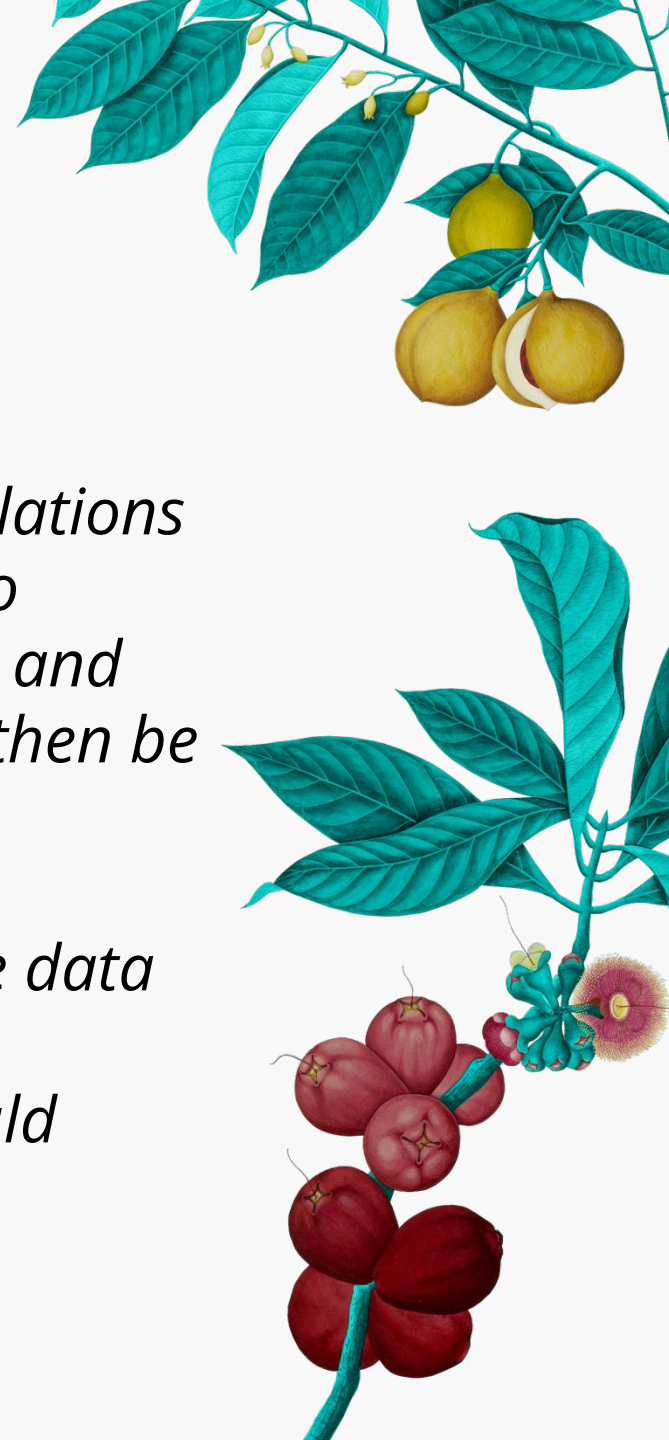
The Data

SHARP is an application developed for Android operating systems on tablets. The application creates a CSV file for use in excel where macros have been developed to aid in the data analysis process. There is publicly available data on the FAO website as well as data from countries including Uganda and Rwanda for comparison and review.

The potential Solution

SHARP produces a lot of raw data that has been somewhat organised through the Excel macros for data analysis.
A system for better understanding the resilience levels, correlations and other attributes will enable development practitioners to understand what activities contribute to increased resilience and what have lower levels of positive impact. Interventions can then be better tailored in the future

We would love for a better, automated system to analyse the data to come out of this hack.
In the mid-term a streamlined tool with fewer questions would allow for easier and shorter surveys covering more people.



About us

We are former FAO employees who worked on agroecology, resilience measurement and supporting smallholders.
***John Choptiany**: I have a background in geology, environmental science and complex decision making. I currently work in the UK on environmental development projects in Africa and Asia.*
***Benjamin Gräub** – I have a background in business & intl. affairs – I now work at the intersection of nature, technology, entrepreneurship & sustainability co-creating knowledge & content with the Ricolab community! I think farmers are central to get to a more sustainable food system and only if they're more resilient can they produce the food we'll all need and want.*



Incentive

We would be interested in exploring adapting SHARP to new contexts. We have already adapted SHARP to the Swiss agricultural context and in a dozen countries. We are looking at making SHARP adapted to non-agricultural contexts and focusing more on climate adaptation.

If you want to, we're here to play – meaning we'll support with our expertise and coaching and would love to find some more people passionate about improving people's lives in the face of climate change.

Contact

Strenghten Farmers' Resilience

Benjamin Graub
John Choptiany

jchoptiany@gmail.com
benigraub@gmail.com

#8





Snaq:

Plate Size Matters

#9

The Problem

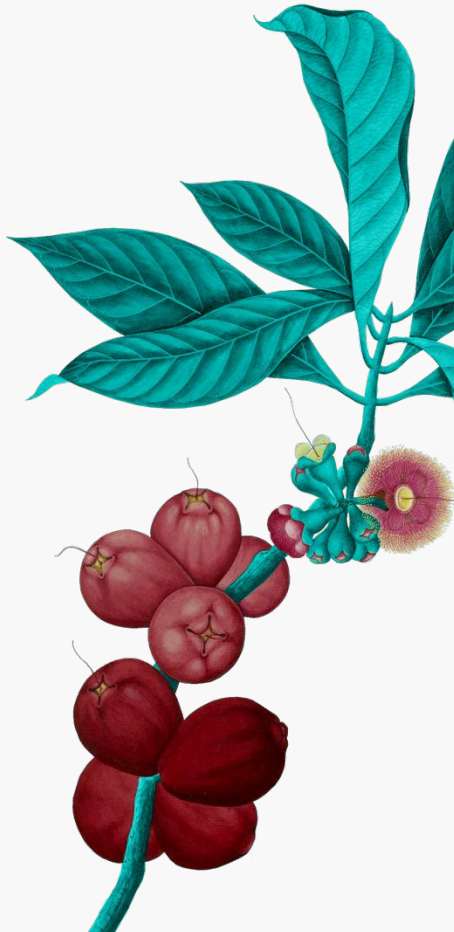
For estimating food portion size the presence, type and shape of a plate play an important role.



The Data

We provide the tool to scrape the images.



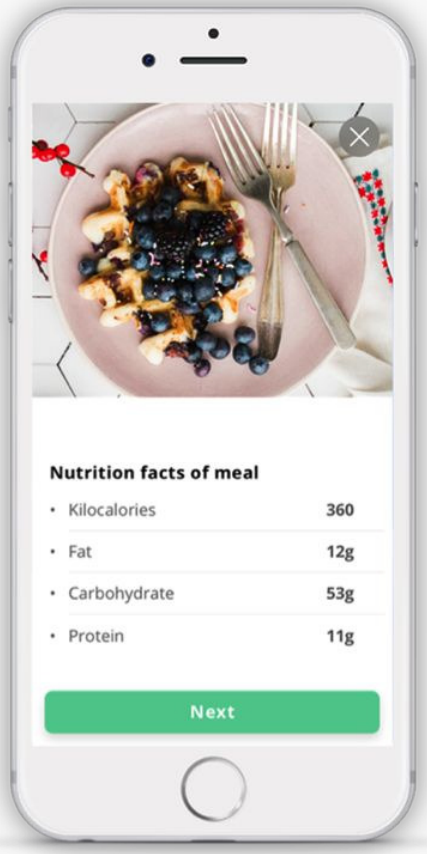


The potential Solution

1. Machine Learning based classifier
2. Traditional non-data driven computer vision approach

Prototype: Take an image of a real plate and classify it correctly with and without foods on it.

About us



SNAQ provides automated food image analysis.

Product offered as an API.



Incentive

We have an open position for a Machine Learning Engineer based in Zurich starting Q2 2018.





Contact

Plate Size Matters

#9

Nico
CTO
SNAQ GmbH
Nico@snaq.io

Aurelian
CEO
SNAQ GmbH
Aurelian@snaq.io



Accelerate your Product at MassChallenge

Inspired?

Step forward.







Edouard Treccani
Operations and Program
MassChallenge Switzerland

https://masschallenge.org

About MassChallenge

Startup accelerator

Startup competition Up to CHF 1’000’000 awarded to startups

Nonprofit, only benefits We don’t take any equity

Why we're here today

Fast-track to MassChallenge

The teams who win this weekend will be fast-tracked to R.2 Judging of MassChallenge

Acceleration

Mentoring Entrepreneurs and corporates

Curriculum Startup school

Free office space At least 4 months (up to 1 year)

Alumni community >130 startups

Acceleration

Food sponsors Unparalleled access



Competition

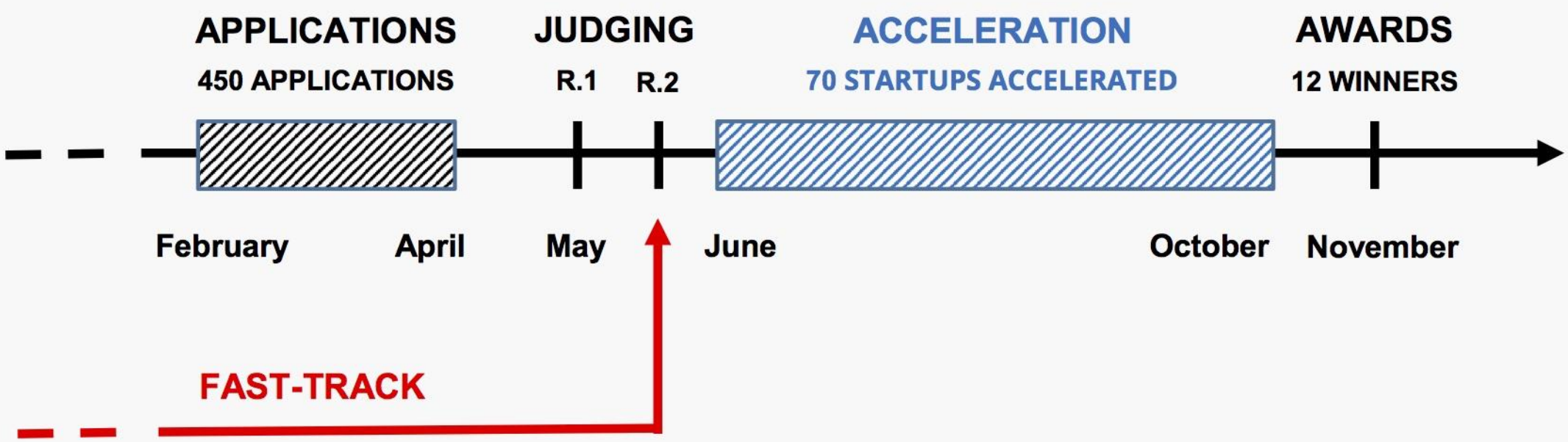


Up to CHF 1’000’000

awarded

in **cash**

Timeline



The Fast-track takes you to R.2 Judging

no application needed

Apply next week

Early-stage Apply with an idea or prototype

Application dates 8th February – 28th March

Coupon code **OPENFOOD2018** to get 50% discount (fee = $25)

https://masschallenge.org

… the
stage
is yours

**Pitch your idea
in 2 minutes**

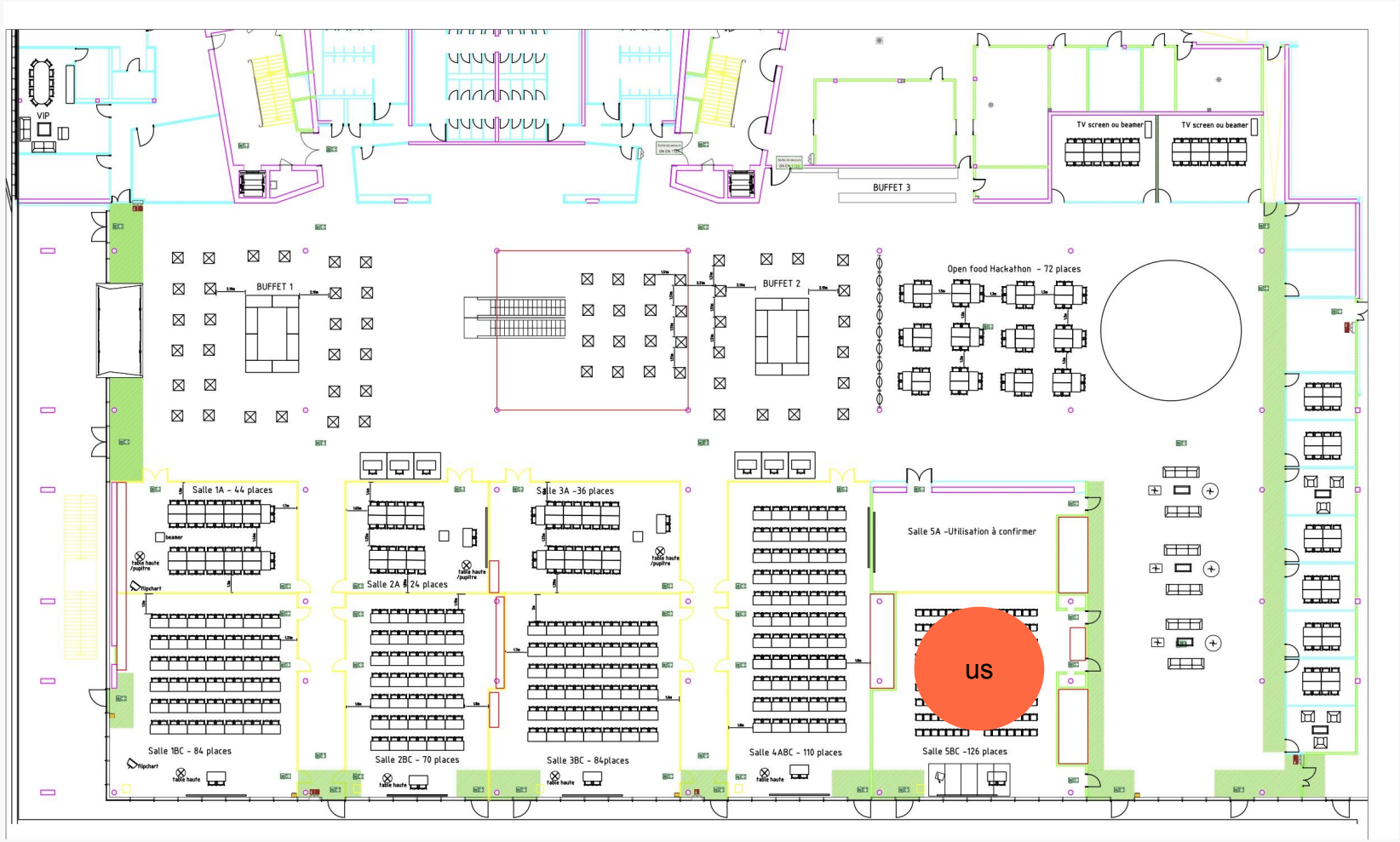




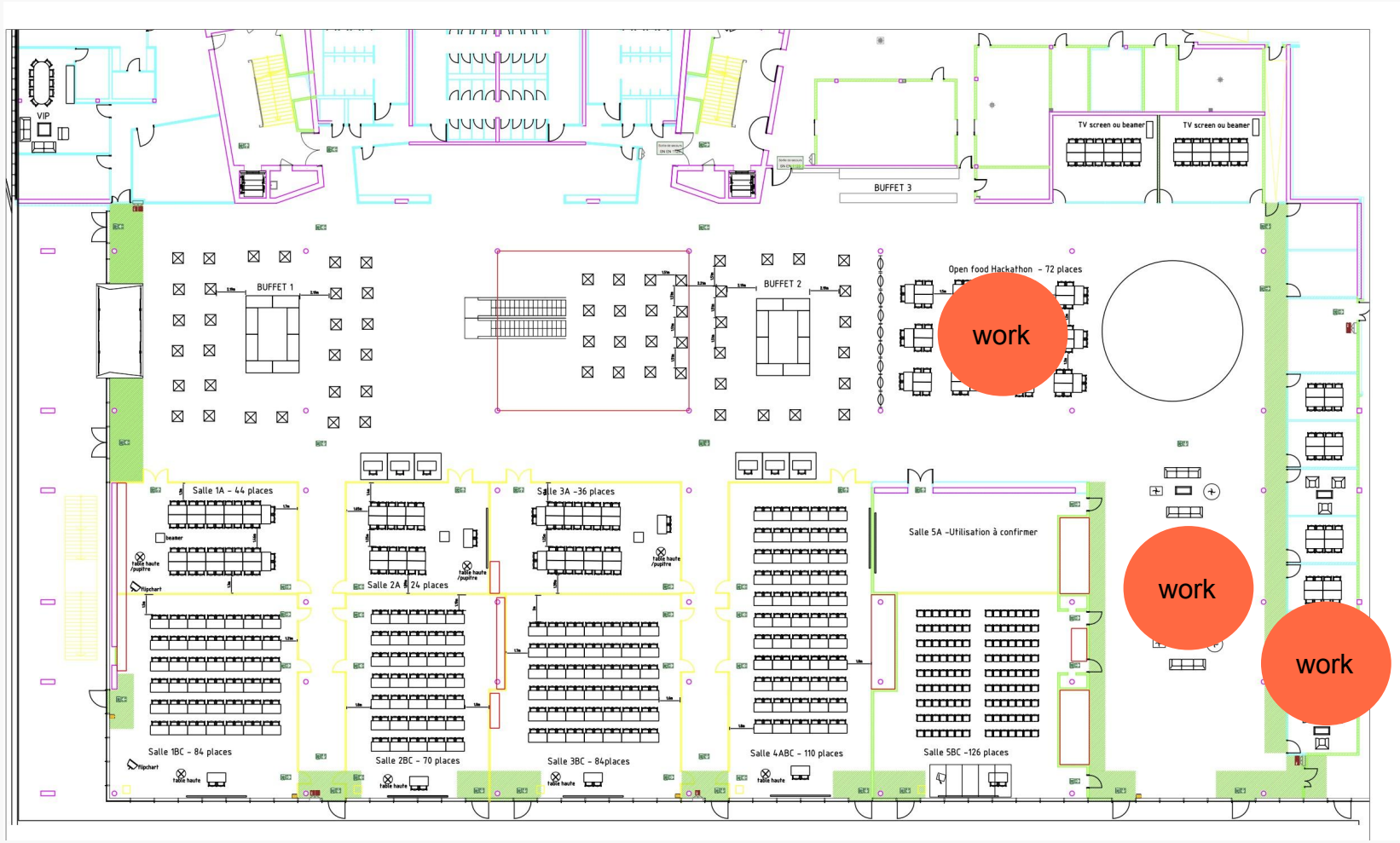


What Now?

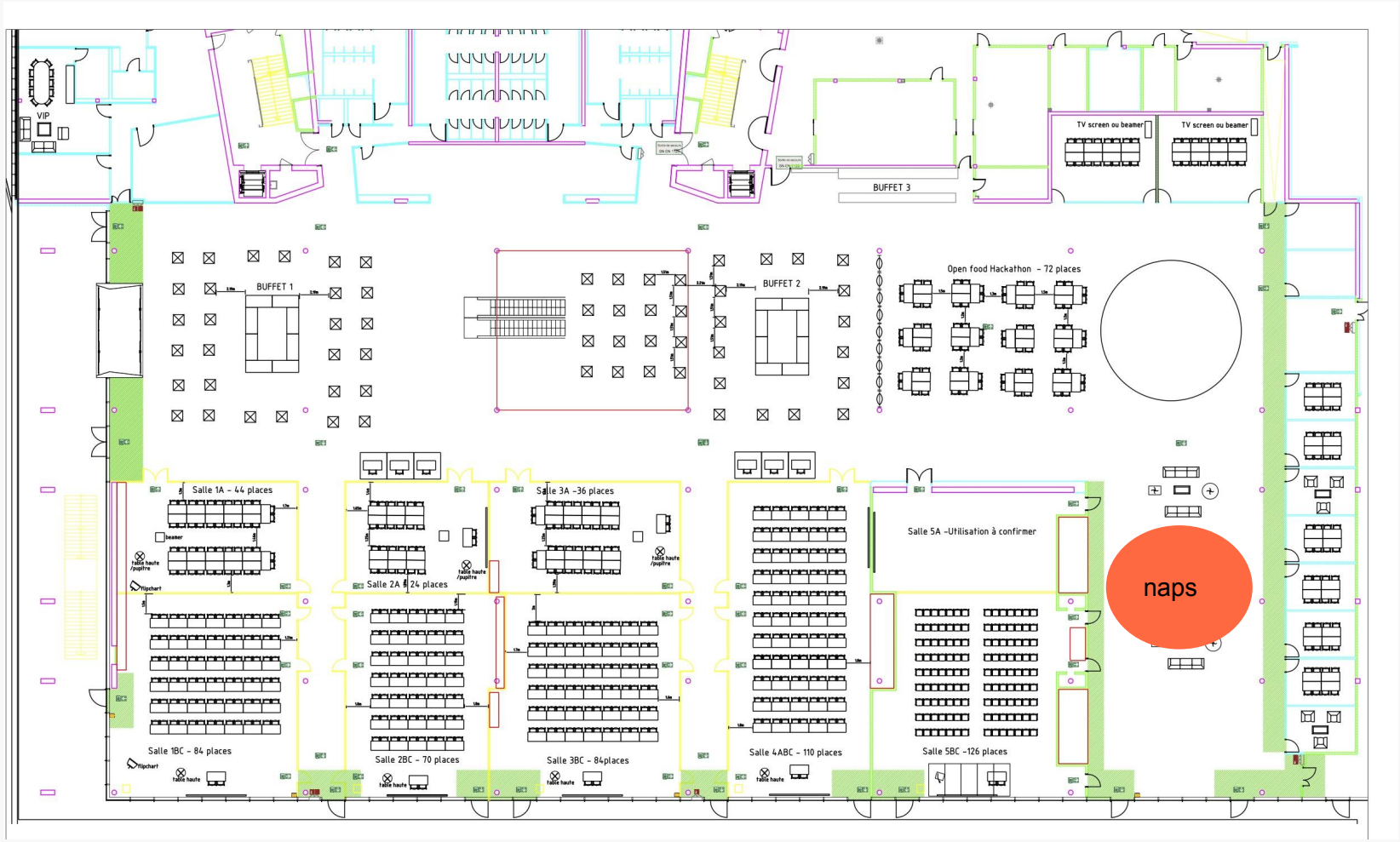
Orientation: you are here



We work here:


VIP
BUFFET 1
BUFFET 2
BUFFET 3
TV screen ou beamer
TV screen ou beamer
Open food Hackathon - 72 places
work
Salle 1A - 44 places
Salle 2A - 24 places
Salle 3A -36 places
Salle 5A -Utilisation à confirmer
work
work
Salle 1BC - 84 places
Salle 2BC - 70 places
Salle 3BC - 84places
Salle 4ABC - 110 places
Salle 5BC -126 places

We (might) take a nap:



Food & Drinks



Saturday

10:00-18:30 Coffee Permanence
12:00-14:00 Lunch
19:00-20:00 Dinner
21:00-06:00 Night Permanence (unstaffed)



Sunday

08:00-09:00 Welcome Coffee
10:00-18:30 Coffee Permanence
12:00-14:00 Lunch

Communication

All official communication is going to happen at the:

Food.Opendata Mattermost Channel

You should have received the sign-up link via mail. If not, please ask your neighbor or me.



Team Building

Opening & Challenges | **Team Building** | Hack | Project Pitch





Instructions in two minutes.
Hint: Don’t overthink it.

Hacking

Opening & Challenges | Team Building | **Hack** | Project Pitch

Prototype Deadline – Sunday 15.00

- Prototype documented on **hack.opendata.ch** (I will provide you with the structure)
- **Presentation** sent to food@opendata.ch (I will provide you with the template)
- **Maybe practice your pitch** until the presentations at 3.30pm

Project Pitch

Opening & Challenges | Team Building | Hack | **Project Pitch**

Pitches Start – Sunday 15.30

- Every team has **3 minutes** to pitch their project
- **1-3 Slides** per team

Winner Selection

Opening & Challenges | Team Building | Hack | Project Pitch

There will be several winners

- Opendata.ch selects 1-2 winners for our incubation program
- A few of the challengers will select their own winner
- We will announce the winners on Wednesday, 31st of January

Selection Criteria

Opening & Challenges | Team Building | Hack | Project Pitch

We look for projects that:

- Use or foster open data
- Are somewhat feasible
- Have a strong positive impact
- Don’t reinvent wheels


Choose your
Challenge

Team Building

Opening & Challenges | **Team Building** | Hack | Project Pitch

Recommended maximum: 6 persons per team

- Challengers will spread in this room
- Many people interested: split randomly!
- Ask questions to the challengers
- **Find your team**
- **Inform us** about your project & number of team members
- Distribute to a workspace
- **Start hacking!**

Challenges

Sustainable Living Lab #1 - Food Save Challenge
Land2Door #2 - The Link to Local Food Access
Ambrosus #3 - Track the Food Chain
SwissDecode #4 - Digital Detection of Milk Fraud
Prognolite #5 - Help Restaurants to Save Resources
Agridea #6 - Foster Local Sourcing
Meal-Good #7 - Meal Good, Feel Good
SHARP #8 - Strengthen Farmers' Resilience
Snaq #9 - Plate Size Matters
TooSweet #10
YummiGame #11


HAPPY
HACKING