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SuBoot – Sustainability Bootstrapping: The First Implementation

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Presentation overview

1. The principles of SuBoot (and what it is)
2. Elements in an overall SuBoot Solution
3. A first implementation in the food chain in Sweden
4. Outlook & discussion

SuBoot principles

SuBoot starting points:
a) Sustainability data are scarce

Especially case-specific data which are essential for decision support.

Data collection still largest effort in case studies, and time consuming

Preparing consistent data further challenge (→ PEF, e.g.)

SuBoot starting points:
b) Bootstrapping

„to pull oneself up by one's (own) bootstraps”

Originally: Baron von Münchhausen, Germany, tales, 18th century: claimed to have lifted himself (and his horse) up from the swamp by pulling on his own hair.

SuBoot = Sustainability Bootstrapping.

SuBoot starting points:
c) Too many labels with “inappropriate” information

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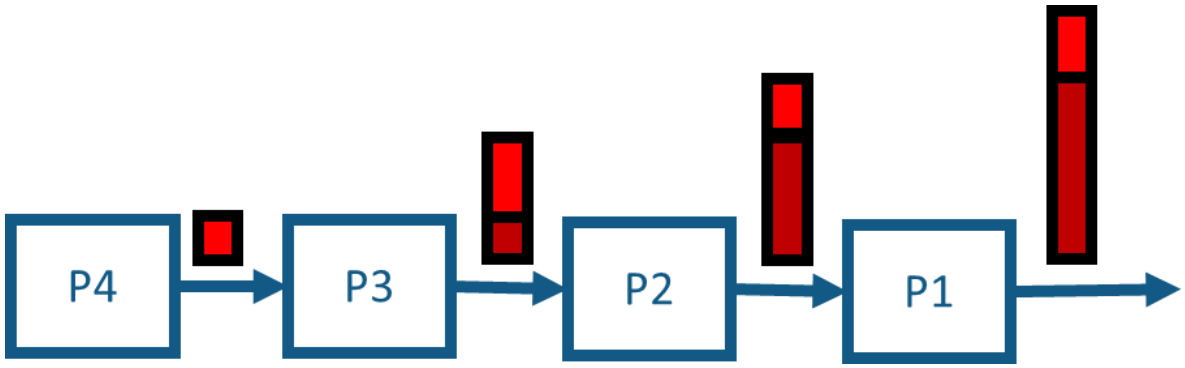
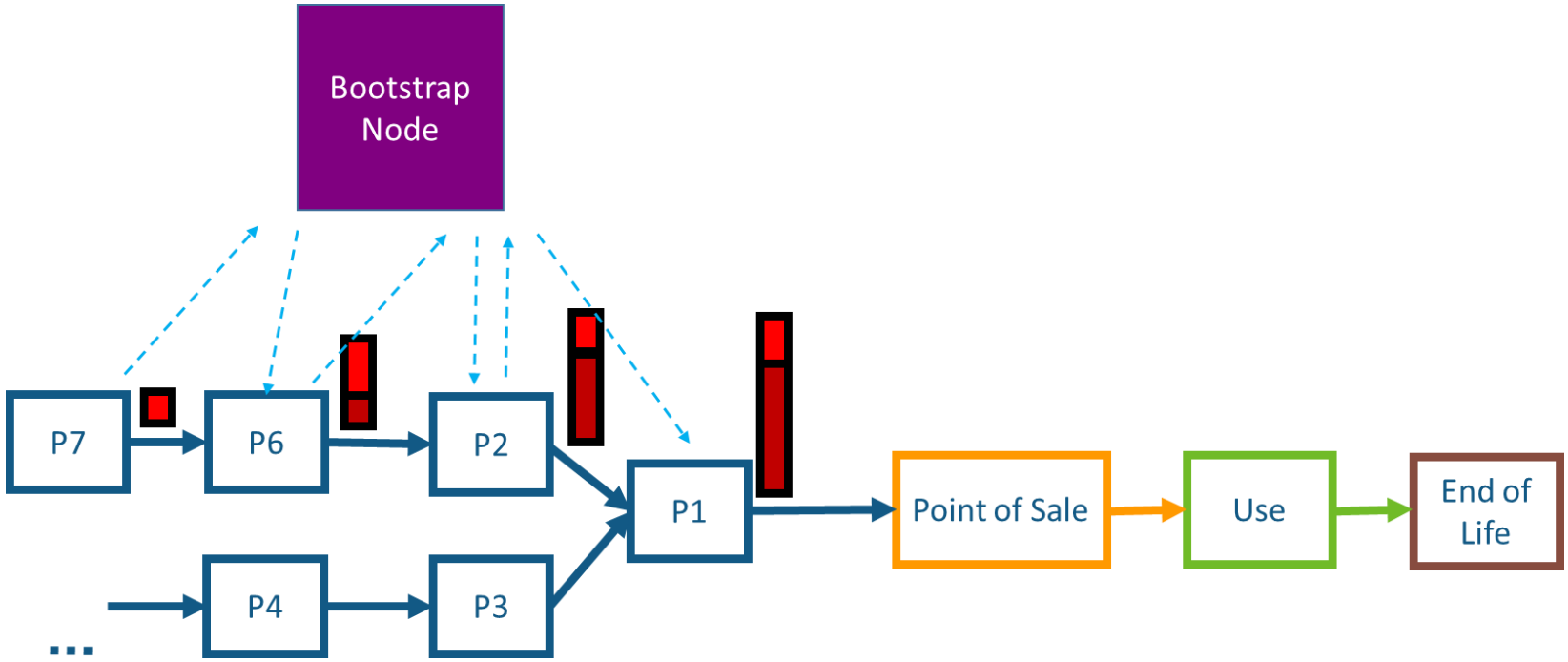
SuBoot princples, 1:
Supply-chain additivity



the impact of each product a producer offers on the market is the sum of the producer's own contributions plus the contribution from previous producers, along the supply chain

SuBoot princples, 2:
Bootstrap node for data exchange



Each producers sees other producers' products with their impacts, and links those which are used in his/her own production to impacts of the own product. Selecting products with less impacts makes the own product less impactful.

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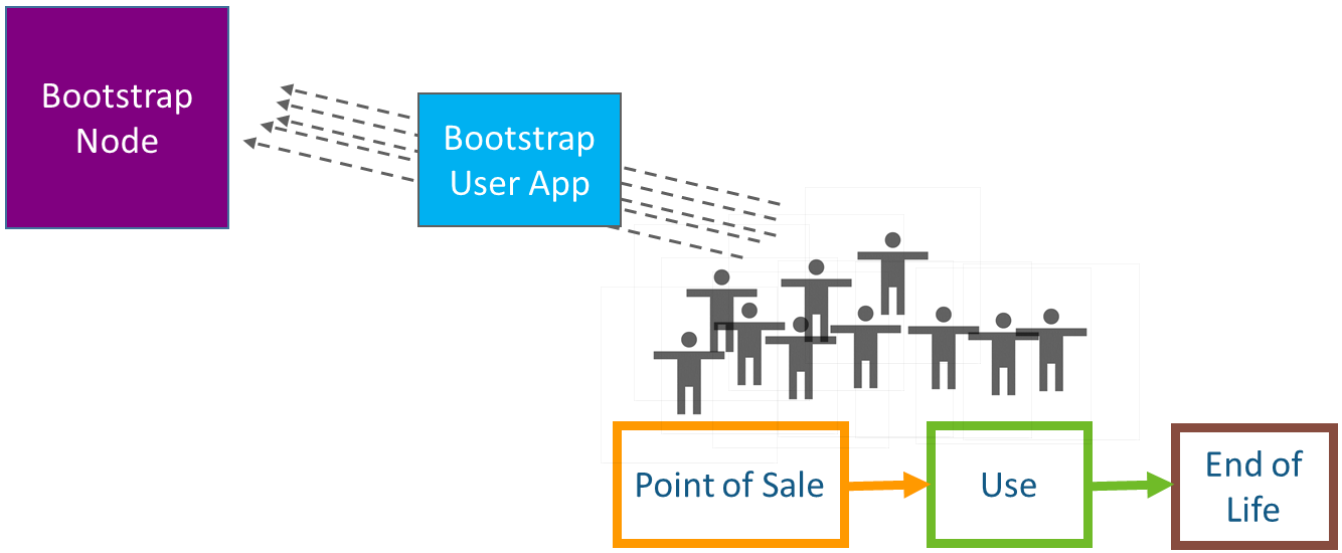
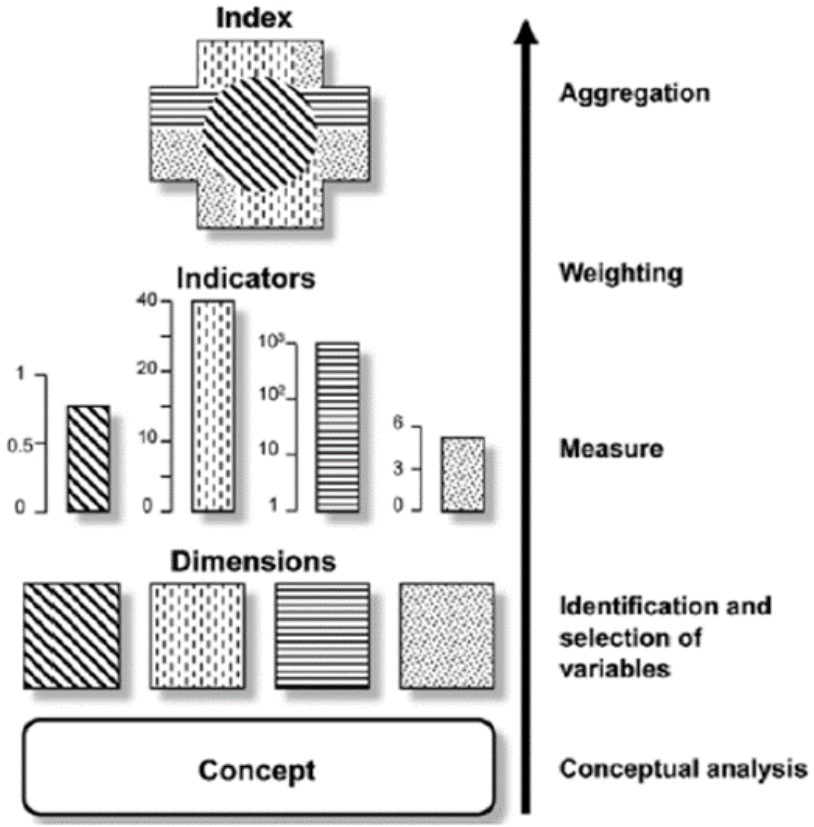
SuBoot princples, 3:
Bottom up user feedback, and user integration



- Users can define their own sets of preferences and can find a product that ticks as many boxes as possible on their sustainability requirements list.
- Purchasing decisions and Suboot queries provide new insights into what consumers are interested in

SuBoot princples, 4:
“flexible response” sustainability label



An index hierarchy, from dimensions to indicators to an aggregated index, initially from Lazarsfeld

Elements in a SuBoot solution

Elements in a SuBoot solution

I. The indicators
II. Data sharing principles
III. Background databases (?)
IV. Governance (who operates all this..)
V. The technical solution

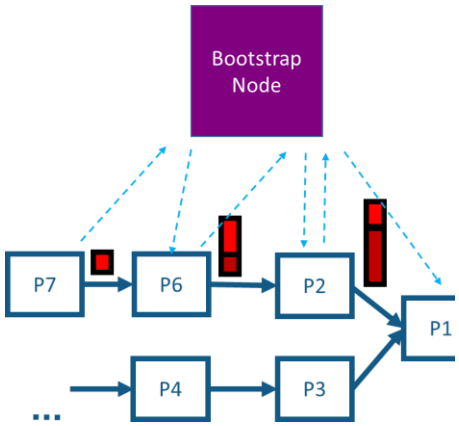
Elements in a SuBoot solution

The indicators

a. Environmental (PEF, ILCD, EN15804, ...)
b. Compliance-related: ROHS, ...
c. Lifestyle, other: vegan, halal,
d. Specific components, substances (allergens, ... also: free of ...)
e. Positive aspects: nutrition value, vitamins, ...
f. ...

Elements in a SuBoot solution

Data sharing principles



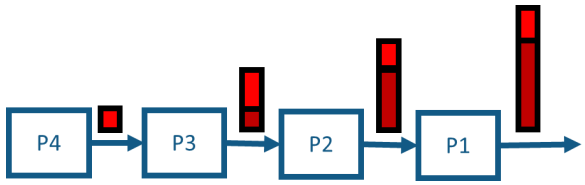
- What should the node (operator, administrator), what should other companies in the system see
- Data sharing license?
- …

Elements in a SuBoot solution

Background databases

- In absence of specific data from producers, background databases “fill in”; they help to make the supply chain calculation meaningful from the start.

  → which databases should be considered (f(indicator sets selected, …)



Elements in a SuBoot solution

The technical solution

- Identification of the products
- Storing, retrieving data, display of results (2B, 2C)
- Calculation engine
- Calculating and making available other information not directly linked to performance indicators: “quality” of the information, …?
- Web/cloud solution, desktop solution?
- “Hand held solution” (=app)?

A first implementation in Sweden

A first implementation

Swedish food sector: project partners

Retailers

coop

ICA

Producers

Arla

Orkla

Lantmännen

Polarbröd

IT

CarbonCloud

GreenDelta

Academic partners

Hushållnings sällskapet

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Swedish food sector: project reference group partners

Retailers

axfood

mat.se

Authorities

NATUR VÅRDS VERKET

Jordbruks verket

Livsmedelsverket
National Food Agency

Göteborgs Stad

VÄSTRA GÖTALANDSREGIONEN

NGOs

WWF

LRF LANTBRUKARNAS RIKSFÖRBUND

IT

DKAB Service AB

A first implementation

Swedish food sector: timeline

- First feedback workshop September 2017
- Until mid-November 2017: first pilot to be implemented based on feedback,
- and then presented in “pilot workshop” in November 2017
- Afterwards: broader testing, plan to extend to textile sector

Wrap up & discussion

Discussion, outlook

- SuBoot allows the creation of massive amounts of specific data for LCA and sustainability assessment, in “good quality”
- SuBoot allows participating companies to distinguish their products from others
- “greener” (less impacting) pre-products make own products less impactful

Discussion, outlook

- Not the first idea of this kind, but I think different for these reasons:
  - Attention to efficient data collection and efficient procedures, bootstrapping
  - Handling of background data, calculation engine
  - Handling of rules and requirements
  - Stakeholder interaction, early feedback

Discussion, outlook

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Discussion, outlook

- The SuBoot idea is really generic and can be applied in any sector (I believe)
- Currently, attempts are to build a textile-focused pilot, in Sweden (with links to other countries)

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Thank you very much!

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