

sustainability consulting + software





### SuBoot – Sustainability Bootstrap project Ciroth, A., Hildenbrand, J., Cinelli, M., Kocev, D., Gjorgjioski, V.

New Delhi, ILCM 2015, September 2015

#### SuBoot– Agenda

- 1. Ideas behind SuBoot: Bootstrapping et al.
- 2. Solutions SuBoot offers
- 3. Current Status

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4. Conclusion & discussion





### 1 Ideas behind SuBoot

#### a) Sustainability data are scarce

Case-specific data are needed; data taken from generic databases do often not fully fit for a specific case







#### b) Businesses can take action, and benefit from it

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Businesses can increase their revenues and market shares if they focus on green and ethically produced goods (several examples are available, mostly demand from Europe / USA?).





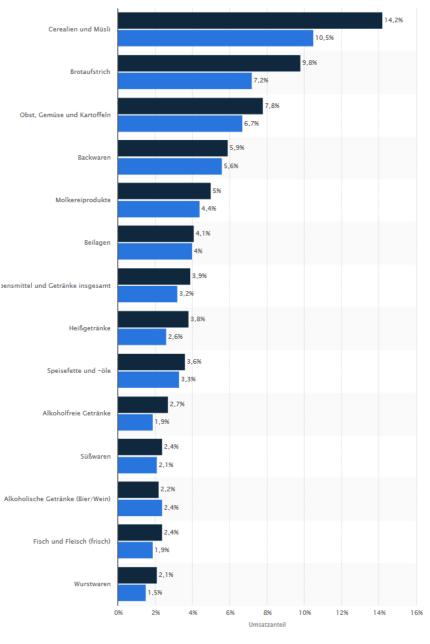
Businesses can increase their revenues and market shares if they focus on green and ethically produced goods (several examples are available, mostly demand from Europe / USA?).

E.g., biofood, Germany:

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## c) Clients are willing to react and to honour

Consumers and business clients are willing to consider sound, reasonable information about the sustainability of products, provided at point of sale..





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#### c) Clients are willing to react and to honor

Consumers and business clients are willing to consider sound, reasonable information about the sustainability of products, provided at point of sale..

...but this information needs to be easy to understand, easy to obtain, and reliable. This information is currently not available for main products.

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#### Labels for packed coffee, Hemköp market Stigbergstorget, Göteborg in Sweden, April 2015









#### d) 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.

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#### d) Bootstrapping

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

## A self-sustaining process that proceeds without external help

```
(common in:
- finance / start ups;
IT (computer booting)
...)
```

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#### SuBoot = Sustainability Bootstrapping.





### 2 SuBoot solutions

## To address these needs, SuBoot offers the following solutions:

- Peer-to-peer bootstrapping module: collecting relevant sustainability and specific information along the supply chain, by suppliers
- A comprehensive **"flexible response" sustainability label**, including information about social impacts, over the entire life cycle
- Bottom up user feedback

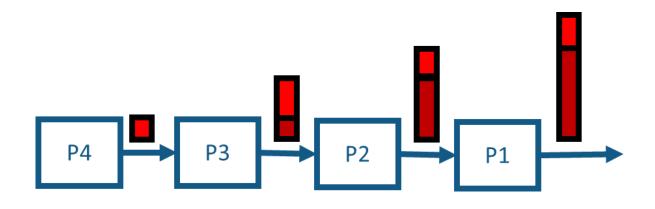
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- Products at point of sale are identified by their barcodes
- A data module is established to collect data from external, non-life cycle sources







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

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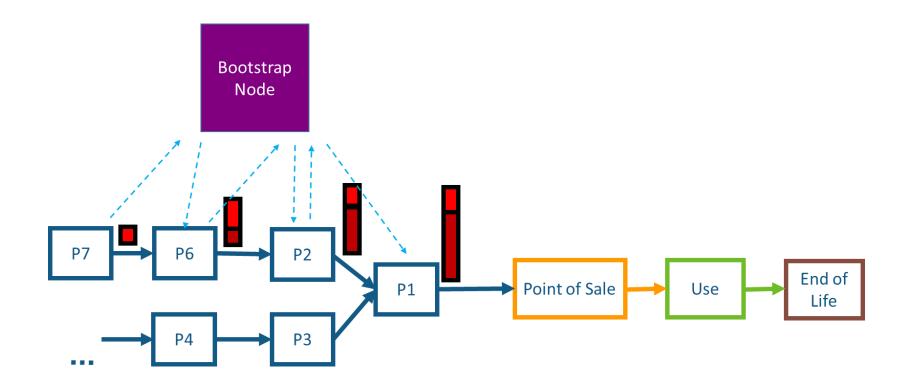


- Companies along the supply chain can submit information about environmental and social indicator results for products they produce and / or distribute.
- The indicator results will typically aggregate, meaning that the impact of each product a producer offers on the market will be the sum of the producer's own contributions plus the contribution from previous producers, along the supply chain

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- Data hubs, or nodes, will take and store data from various sources relevant for Sustainability Assessment, and distribute this information to other nodes and users who are in need of life cycle related sustainability data.
- Especially, users and companies registered in a node can upload their own, self-created data sets, and find those of other users who have published data. They can also operate own nodes

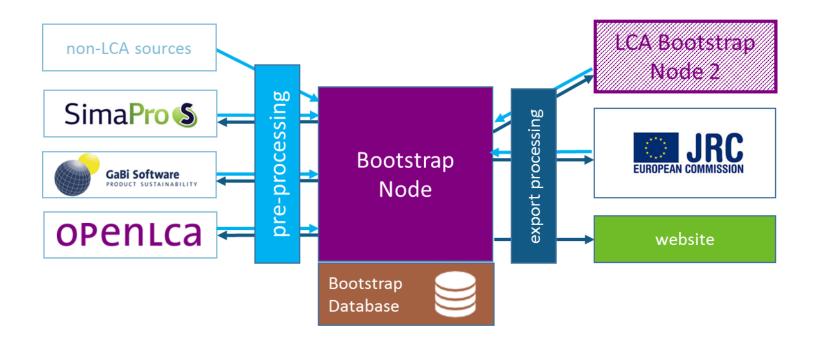
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#### **One bootstrap node in detail**

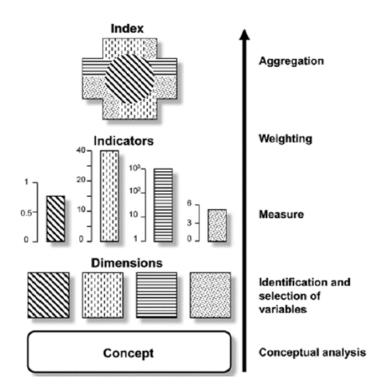
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#### "flexible response" sustainability label



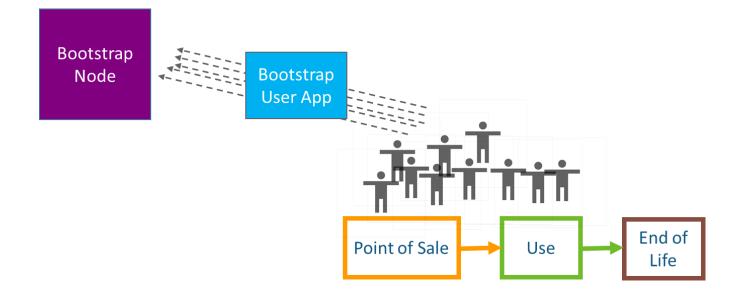
An index hierarchy, from dimensions to indicators to an aggregated index, initially from Lazarsfeld

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# 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

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#### Products at point of sale are identified by their barcodes



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- Suboot tracks product life cycles which are potentially global, via barcodes (UPC-A Barcodes) which are directly available at the point of sale, and thus can also be "collected" in a bottom up approach.
- This barcode is used to identify the products over their life cycle, together with their producers, and are used to identify components of products, in assembly and disassembly steps.



## A data module is used to create and refine data from non-LCA sources

 A data module will add data sets from other sources, starting from energy / electricity and transport data sets. Data from various public sources will be used and adapted to meet the requirements of Suboot.

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### **3 Current Status**

#### **Current Status of SuBoot**

Technical project consortium established:

- GreenDelta: Sustainability data, life cycle calculation, data management, life cycle methods
- GrabIT: Data curation, big data analyses
- Warwick university: MCDA (multi-criteria decisions)

Advisory Board first members established (e.g., JRC)

#### 1st Companies to join (food supply chain Italy; retail Italy; retail BeNeLux)

#### Pilot to be implemented start autumn 2015

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#### $\rightarrow$ It is a perfect time to join.

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### 4 Discussion and Outlook

#### Discussion

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- Peer-to-peer bootstrapping and data collection
- A comprehensive "flexible response" sustainability label
- Bottom up user feedback
- Identifying products directly by their **barcodes**
- collecting data from external, non-life cycle sources

Are five main, important and linked solutions that are currently implemented in SuBoot in a participatory approach.





#### Discussion

All five together finally help to make sustainability data of good quality available, over the entire life cycle chain, and put it into the real life decisions of businesses and end consumers.

More news to come...

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### Thank you

Contact:

Dr. Andreas Ciroth GreenDelta GmbH Müllerstrasse 135, 13349 Berlin, Germany <u>ciroth@greendelta.com</u> www.greendelta.com