

# Digital Product Passport concept development project results

Katri Pylkkänen, Advisor, Textiles & Sustainability  
Finnish Textile & Fashion

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A DPP  
concept that  
can serve  
different  
industries  
and value  
chains

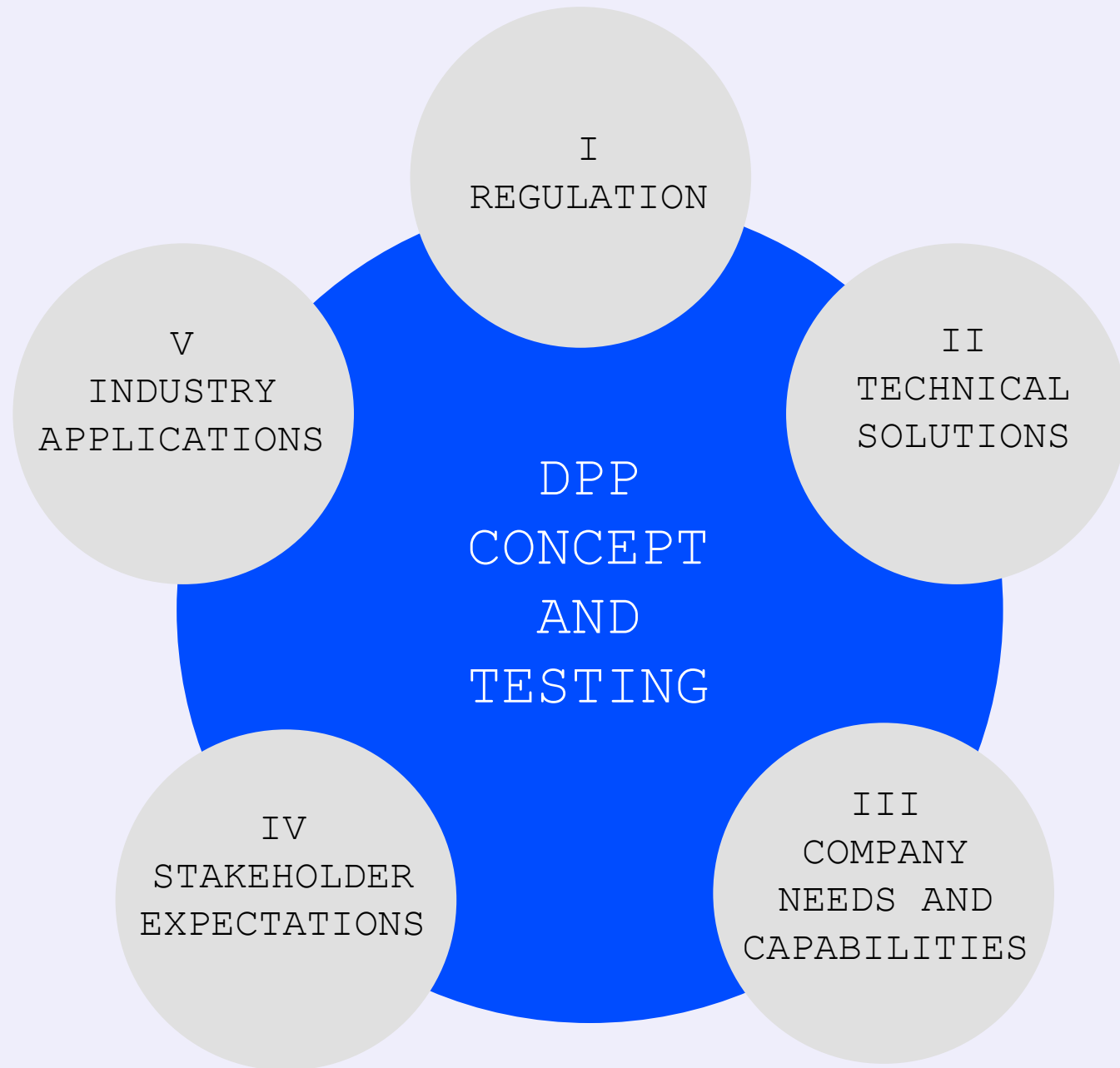


CONCEPT

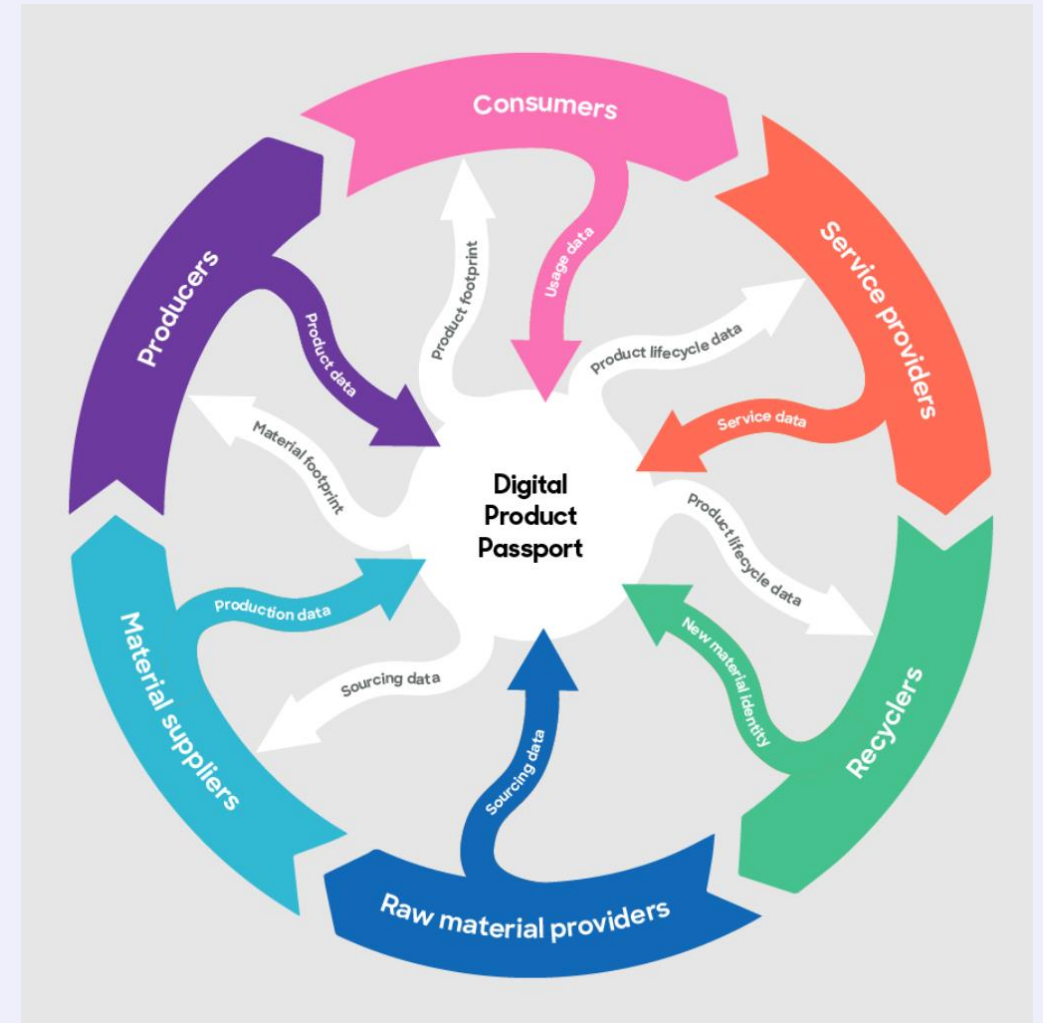
## Digital Product Passport

Solita: Marika Nokelainen, Saana Tikkanen, Sami Köykkä, Lauri Kieksi,  
Gaia: Anu Pulkkinen, Solveig Roschier, Annu Markkula, Päivi Luoma,  
Minna Jyräjä, Leo Bergman

SOLITA | Helsinki, Tampere, Oulu, Turku, Lahti, Stockholm, Gothenburg, Tallinn, Munich



Concept focuses on **actors** who all have an important role in both giving and receiving product data



# Principles and design drivers

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**Effort - value  
balance for  
businesses**



**Leveraging  
existing  
data**



**Reliable data  
via  
standardized,  
verifiable  
credentials**



**Passport  
of actual,  
existing  
products**



**Generic  
and widely  
adaptable**



**Open  
ecosystem**



**Modular  
and  
scalable**

Data will be  
provided to  
DPP via many  
different  
**interfaces**

**Digital Product Passport**

**Your facility**

**Your production**

Products  
Create new product  
Production batches  
Add new production batch

**Create new product**

Type

Name or code

Material

Material ID

+ Add material

Certificate

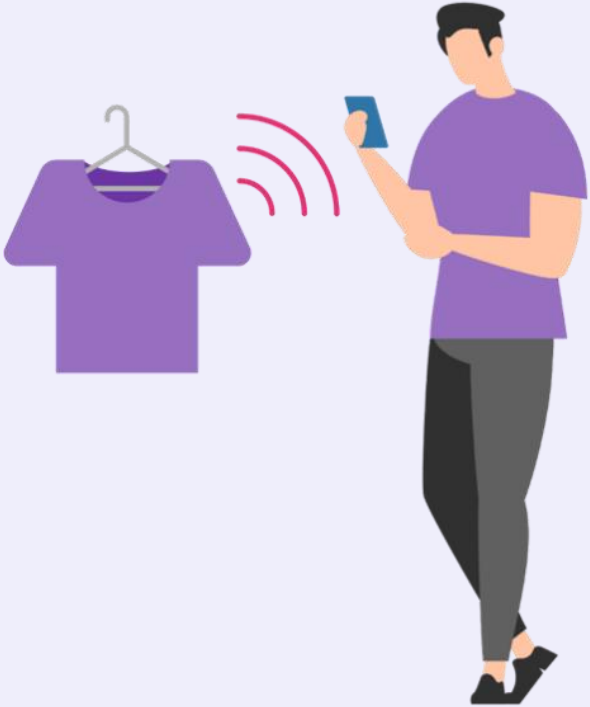

Certificate ID

+ Add certificate


Measures

Create

Logged in as User at Factory



**EU Digital Product Passport**  
Digital ID: 272738948737  
EAN · QR · NFC · RFID



**Product lifecycle**  
made sold used cared repaired recycled

Manufactured in

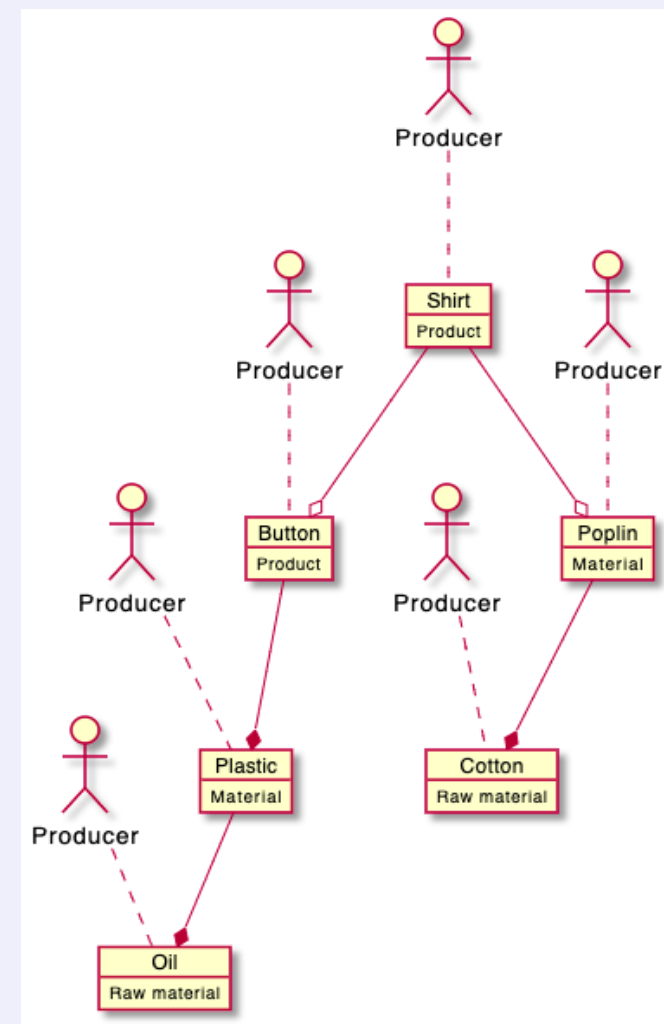
Materials and components

DPP can be  
thought as a  
**tree of  
information**

Parts of the product have their own data sheets

Data managed by the actor who is producing that particular information

Data linked together by unique identification keys



DPP could  
benefit from  
**de-**  
**centralized**  
**data-storage**

World Wide Web Consortium (W3C)  
standards-based, **de-centralized solution**

Each actor and product has a **unique identifier**

**A verified credential** is created when an actor creates a claim about the product

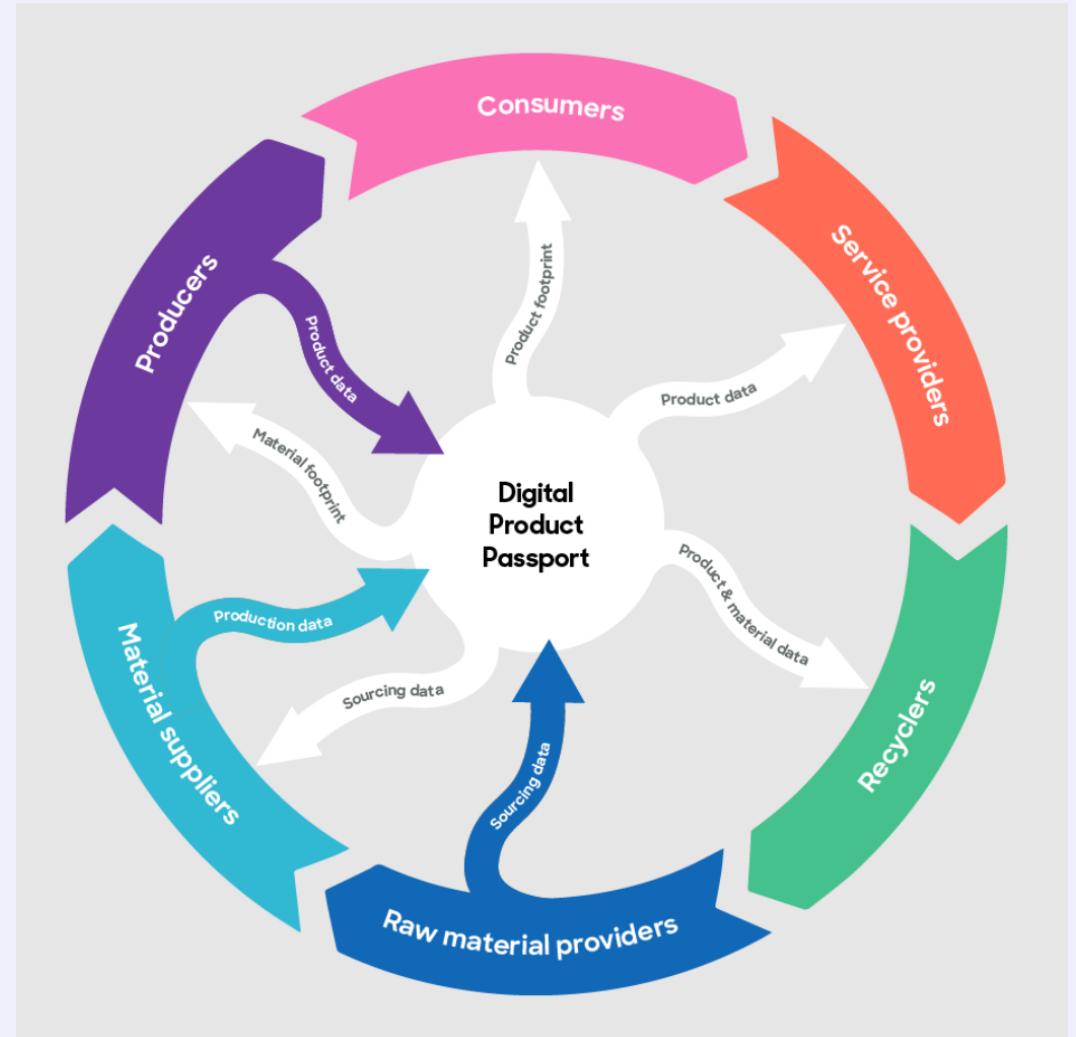
DPP  
should be  
**implemented**  
**in phases**

1st phase:

Focuses collecting existing data

Sourcing and manufacturing data

Focus on increasing transparency



**Business  
value is  
the key to  
big  
positive  
impact**

## Opportunities of DPP for companies

Near-term

**0. Digitalization of the existing product info**, so that it follows the subject. Enabling same up-to-date product info to everyone.

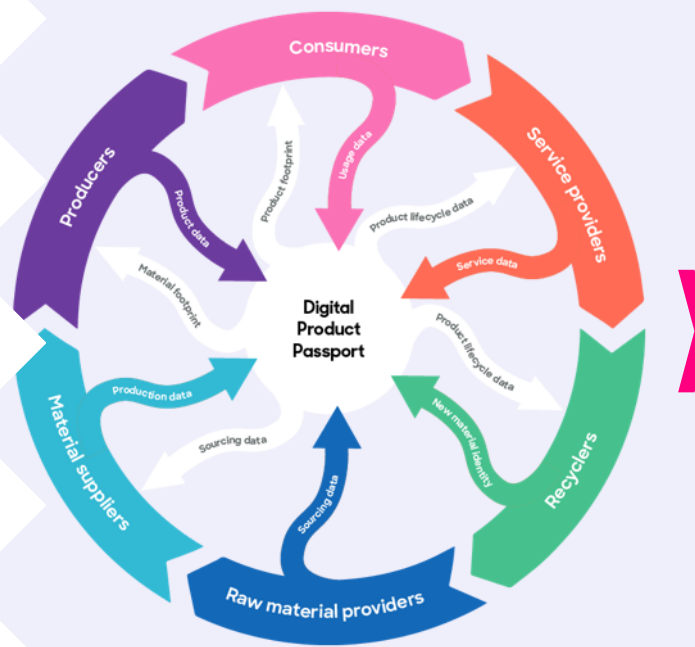
**1. Transparency and standardization**, same ground rules and viewpoints to everyone

**2. Product value chain info** builds a picture about product safety and sustainability

**3. Easier communication** about product quality and sustainability. **Brand and reputation benefits**

Long-term

**4. Critical evaluation of company's own value chain** (inc. partners & subcontracting) becomes easier. Inc. social & ecological viewpoints.



## Big impact

**Better quality products:** better design and development of products leads to more durable high-quality products.

**Better actors and collaboration in the field:** pressure to favor partners with good reputation and practices. No more room for irresponsible players.

**More sustainable consumption:** Ability to guide consumers towards better choices (conscious or not).

**New business and innovation** around circular economy. More jobs around circular economy. Safe and better-quality recycling materials and possibilities to utilize them.

**More efficient recycling = fewer natural resources used.** Product industries become more sustainable.

# Companies' concerns

Are companies willing and able to share the data?

What information should be collected?

How much time and human resources will it take?

Do companies need new skills?

Are different sized companies equally treated?

What will this mean in practice and when?

How to handle old and new versions of product passport?

How to make the data comparable?

The amount of data is huge. How to make the data usable and make the most out of it?

Who owns and hosts the data? Who is responsible?

Is data up-to-date and trustworthy? How is misuse prevented?

Is there a risk of developing too many systems and applications?

How fast does regulation develop and change?

How to avoid DPP becoming giant with too many data requirements, too much reporting?

How to handle actors outside EU? If they are not reached, big part of value chain data is lost.

How to integrate with existing and competing solutions?



Thank  
you!