Input for the report on EU Strategy for Sustainable and Circular Textiles
Digital Product Passport

25th November 2022

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Reference: Klepp et al., *Input for the report on EU Strategy for Sustainable and Circular Textiles: Digital Product Passport*, November 2022, SIFO, https://clothingresearch.oslomet.no/input-on-eu-strategy-dpp/

- **Why is a digital product passport either a good or bad idea?**

Overall, the introduction of a digital product passport is a good idea if it is done the right way. It can also have severe negative effects. This depends on what kind of information it contains and how this information is to be verified. Consumers are increasingly demanding that businesses behave more responsibly when it comes to their sustainability efforts. At the same time, misleading or unsubstantiated green claims made by certain players abound (e.g. research commissioned by the European Commission shows that 53.3% (80 out of 150) of the environmental claims analysed are potentially misleading (McGuinn et al., 2020). To counter this, many industry sectors are now experimenting with the application of (digital) technologies to improve product traceability and transparency.

However, the problem is that these initiatives lack common and consistent language or ways to allow for information transfer between different stakeholders across value chains. Using a digital tool, such as a digital product passport (DPP), can be a viable solution.

According to (Gôtz et al, 2022), DPPs could "be key to enabling circular economy and carbon reduction strategies, including those for new markets and business models, and also to social compliance reporting". DPPs can enable quick and convenient access to and sharing of product-related information. Producers, consumers, waste operators and public agencies can easily access and upload relevant and targeted information for other stakeholders via the use of a DPP. Easy access to relevant information should allow for more informed purchasing choices by consumers.

Unintended negative consequences can occur because the information about environmental impacts can give consumers a «good conscience» and therefore legitimise purchases, such as reducing one's environmental impact by choosing better products. This psychological rebound effect has been documented – labelling schemes already reduce consumer guilt and unease and as such further increase consumption (Olson, 2022).

- **How realistic is it to develop a digital product that the entire industry can implement without creating unequal competition between large and small companies, industry groups, or countries in the EU?**

According to the Commission's analysis of the stakeholder consultations on the Ecodesign Regulation (set out in Annex 2 to the impact assessment), the digital product passport is "generally supported by clear majorities across all stakeholder groups, as are incentives and tools to stimulate demand for sustainable products".

However, there are, of course, several challenges to introducing DPPs on the EU market. The disadvantage of requiring detailed information and systems is that this favours large companies that

already dominate the clothing sector. Further, the DPP needs to be designed in the right way to allow for meaningful comparisons between products. The design should allow for an assessment of not only harmful impacts but display positive attributes of a product too. The right balance also needs to be found between information-sharing and protecting personal and corporate data, but policy interventions to improve the scaling of DPPs should help overcome some of these challenges. Providing the right instruments (funds, training programmes) for the uptake of DPPs by SMEs, start-ups, operators, public authorities as well as consumers should play a key role in this. In addition, enforcement and market surveillance activities need to be foreseen to ensure the right implementation of DPPs.

It is difficult for many clothing consumers to find clothing that one really likes and that fits well. Making decisions based on information about production processes could increase the number of bad purchases – and as a consequence the environmental impacts.

The information needs to be reliable – and not simply favours those that master the art of lying best. This requires some sort of 3rd party (that is not operated by the industry itself, as is currently the case) that checks the information.

There is no reliable information about the environmental impact of different textiles. There is the least knowledge about the parts of the textile process that pollutes the most (dyeing and finishing). There is no consensus on a system to compare the environmental impacts of clothing. The most used tool (LCA) has great weaknesses concerning clothing. It is lacking a functional unit, it is lacking measurements for important polluting factors (such as microplastics). So far the existing rating tools favour plastics and therefore also indirectly fast fashion. A DPP mustn't further enhance the issues the above already creates concerning natural fibres, small-scale producers, craft production, local production and quality production in a wider sense.

The major problems with LCAs can be summarised like this:

Attributional LCA is very challenging as the primary tool for measuring sustainability performance because:

- is not designed to enable equitable comparison of products
- only assesses harmful impacts, so omits/undervalues positive attributes (i.e. renewability, biodegradability, reusability and circularity).
- significantly advantages products made from fossil fuel-based raw materials over natural raw materials relative (the former gets an 'environmentally free' raw material (i.e. oil) and the latter doesn't).
- focuses more on the footprint of raw material sources and manufacture rather than the factors causing premature end-of-life. There are always trade-offs in changing raw material choices. By contrast, garment designers, manufacturers and consumers can reduce the environmental impacts of all raw materials by maximising the wear life of garments (and therefore minimising new garment purchases).

- **Do you know of other digital product passports that can be used as inspiration for the textile area?**
  - Battery Passport
  - Niaga® tag
  - https://www.circulardataprotocol.org/digital-id

Textile-focused DPP-versions:
This a product passport system that is meant to enable recycling: circular.fashion
Tracing the product from origin – storytelling and transparency: Provenance: Sustainability Marketing Technology
Circularity for larger companies: lablaco — fashion made circular

(It could be possibly to build on the two mandatory schemes for fibre content and care labelling.)

- **How to create a meaningful passport that gives consumers the necessary and useful information for sustainable choices that affect the environment and climate change?**

A DPP should, in broad terms, be interoperable, easily accessible and usable for consumers and stakeholders along the supply chain and contain relevant product-specific information in a transparent manner. The DPP should provide information on the origin, composition, and repair and disassembly possibilities of a product, including how components of a good can be recycled or disposed of at end of life.

It should be noted that a DPP is only as effective as the information is it communicating. Under the Ecodesign Regulation (ESPR), the environmental impact of products should be determined via lifecycle analyses to establish which products should be covered by delegated acts which would outline ecodesign requirements. Currently, the Product Environmental Footprint (PEF) is the EU's methodology for measuring the environmental impacts of products. There have been suggestions made that the PEF could help identify the most relevant products to be covered under the ecodesign requirements and which would need DPPs. We would caution against this approach, as the PEF does not accurately account for some key aspects of the textile sector's environmental impact, such as microplastic release, plastic waste, and circularity. Should the current PEF methodology be the basis for future regulation of ecodesign requirements - in particular those made for apparel and footwear - we are concerned that its use would omit these crucial product impacts that are the driving force behind the industry's huge environmental damage. Until the PEF is changed, there is a risk of omission of certain products which actually would be more environmentally harmful than the PEF would show them to be.

The information needs to be relevant for the user, controllable and facilitate the best and most efficient waste management possible. Below is our proposition in order of importance. First, we detail what MUST be included. Then wishes that would be a good idea. Below is what it should not include because it will increase uncertainty or have large negative effects:

Important:

- Name of the brand and /or producer
- Year produced
- Good (and correct) size system and information about the measurements (that each size corresponds to)
- Fibre content + share of plastic
- Care labelling
- Controllable use properties where they are particularly relevant (for businesses over a certain size): waterproofing, wind proofing, fading, pilling and shrinkage.
- Definitions or other explanations of specific terms used in the marketing of the clothing

Also desirable:

- Content of all chemical substances on the REACH database
- Content of disputed technologies (e.g., GMO, nano)
- Expected lifetime in number of wears and washes
- Production information/traceability: which raw materials, what processes, and where? Not just one country of origin, but the entire garment journey

But not:

- Information based on global average environmental impacts (LCA/PEF etc.)

- **Of the existing labelling schemes already used in the textile sector, which ones can be used as inspiration or should be integrated into the digital passport?**

Fibre labelling and care labelling – (improved) size labelling. Official eco-labels: EU Ecolabel and the Nordic Swan Ecolabel could be integrated/shown as these are based on individual product data.

- **What other questions should a research workshop on the digital product passport address?**
  - Best way of sharing data when it comes to DPPs: decentralised data-sharing solutions vs a centralised approach (pros and cons)
  - Mandatory vs voluntary approach in the application of a DPP (pros and cons)
  - How can one substantiate the accuracy of data provided by the players along the supply chain of a product
  - Data control vs data sharing: ensuring companies only share the relevant data while at the same time developing cloud-based data solutions to enable companies to pool their data together
  - Physical vs. distance selling: the manner in which a DPP shall be made accessible to customers before they are bound by a sales contract, including in the case of distance selling
  - Overview of potential format options for a DPP: QR codes, Data Matrix codes, RFID tags, NFC tags, 1D barcodes and more to understand which ones are most/least user-friendly and why (the idea would be to enable a consumer to read the DPP with a smartphone without having to manipulate the phone too much)

It is important to discuss who will be the losers of the scheme and what can be done to prevent this. It is also important to discuss what needs to be implemented to verify the information so that it does not (once again) be profitable to be dishonest

- **What other relevant research questions could be of interest to STOA?**
  - Best practice overview: how can the EU set global standards while building on already existing standards (e.g. GS1, 2022) and by joining forces with like-minded governments/institutions/third parties (e.g. working jointly with the UN, Organisation for Economic Co-operation and Development (OECD), G7, G20 and EU–US Trade and Technology Council to promote the global uptake of DPPs).
  - The consumers need to be heard in such an important process. It would be possible to conduct a research project about what information the consumer is missing and how this can be given in a straightforward manner.

References

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