



Digital Product Passport



Industry is going to be heavily regulated

2027

Digital Product Passport (DPP) will become a mandatory requirement for multiple Industry Verticals

2030

All textile products imported to the EU must be:

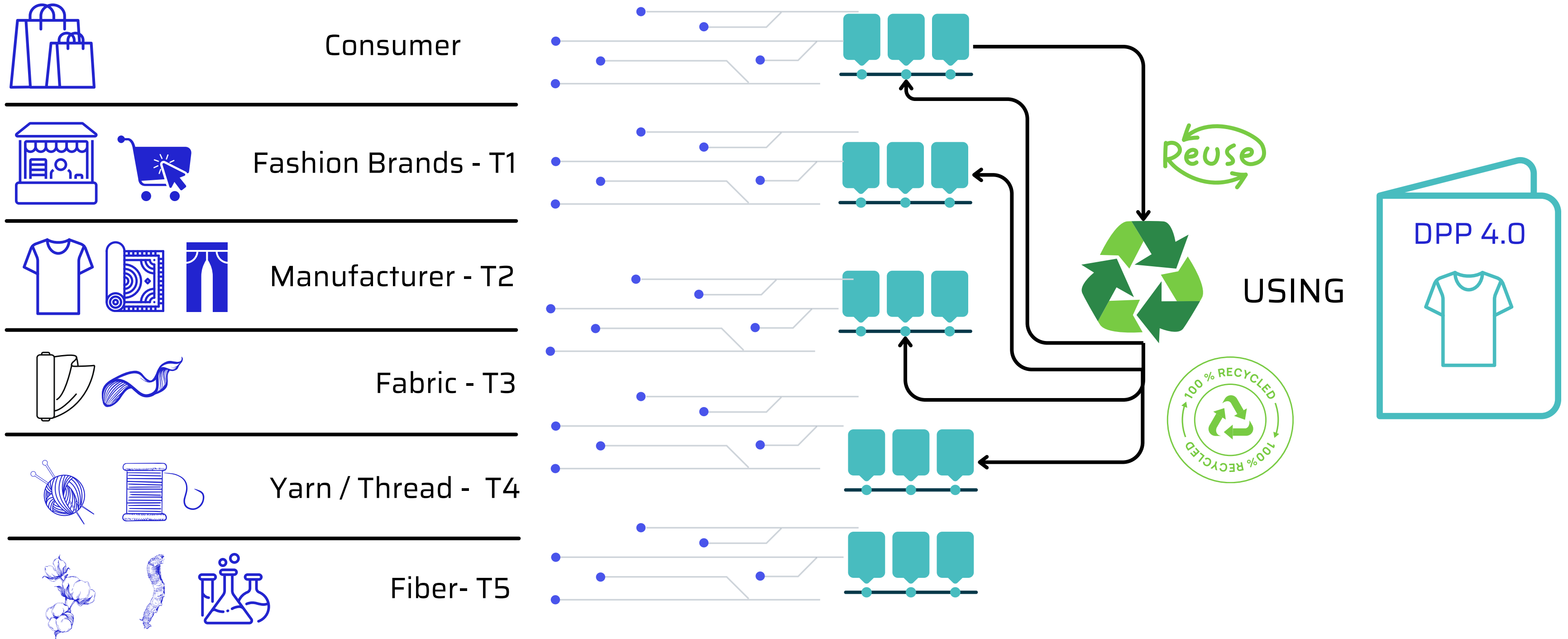
- Durable, repairable and recyclable
- To a large extent, it is made of recyclable fibre
- Free of hazardous substances
- Produced respecting social rights



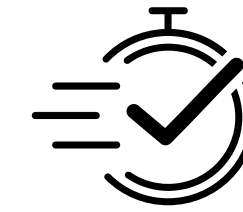
With a string of new Legislations and policies for Textile

- EU strategy for sustainable and circular textiles
- Ecodesign for Sustainable Products Regulation
- Digital Product passport Regulations
- Extended Producer responsibility on Textiles (EPR Rules)
- Commercial commitment on Product durability
- Producer responsible for reuse, recycling of their products
- Waste Framework Directive

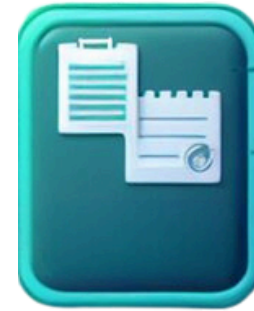
Impacting both Horizontal and Vertical Value Chain



CHANGES START WITH A STANDARDIZED DIGITAL PRODUCT PASSPORT - DPP



Manufacturer Address



Country of Origin



Customer Feedback



UID based on ISO/IEC 15459:2015 standard



Fabric Type



Manufacturing Details



Eco Labeling



Recycling Approach

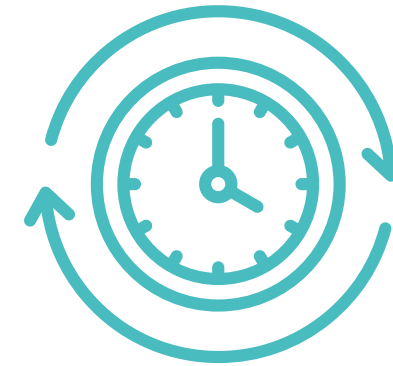


Demanding quick actions from?

FASHION BRANDS



IMPACT - HIGH



Regulatory impact - 2026
Time to Act - NOW

- NO IMPORT TO EU WITH OUT TEXTILE PASSPORT
- COMMERCIAL COMMITMENT FOR DURABILITY
- RISK OF BAN ON POOR QUALITY
- MEET ECO DESIGN REQUIREMENTS FOR EASY REPAIR/ RECYCLING
- IMPACT OF ECO MODULATION ON PROFIT MARGINS
- EPR - FINANCIAL RISK WITH HIGH RECYCLING COST
- IMPACT ON PRODUCT QUALITY ISSUES

Demanding quick actions from?

YARN/FABRIC MANUFACTURER



IMPACT - HIGH



Regulatory impact - 2026
Time to Act - NOW

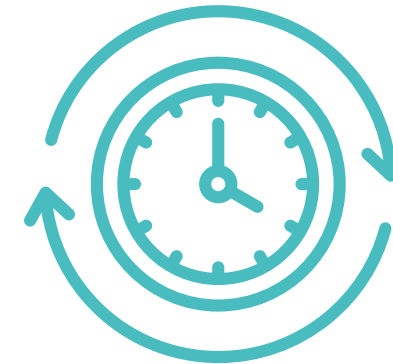
- NEED FOR ENHANCED MANUFACTURING VISIBILITY
- ABILITY TO SHARE MANUFACTURING DATA INCLUDING COMPOSITION/RECYCLING APPROACH
- MEET PRODUCT DURABILITY DEMANDS
- HIGH QUALITY REQUIREMENTS FOR FIBRE
- REDUCE/AVOID PLASTIC ADDITION TO FABRIC
- ROLLBACK IMPACT ON ECOMODULATION AND EPR

Demanding quick actions from?

TEXTILE MANUFACTURER



IMPACT - HIGH



Regulatory impact - 2026
Time to Act - NOW

- NEED FOR ENHANCED MANUFACTURING VISIBILITY
- ABILITY TO SHARE MANUFACTURING DATA INCLUDING COMPOSITION/RECYCLING APPROACH
- MEET PRODUCT DURABILITY DEMANDS
- NEED FOR COMPLIANT AND ETHICAL MANUFACTURING
- 3rd PARTY AUDITORY REQUIREMENTS FOR ECOLABELS
- ROLL BACK IMPACT OF EPR AND ECO MODULATION

WITH 97 data attributes identified in the data protocol

Info Group	Item Number	Data Field Name	Examples	Data Format	Definition
Brand information	100,00	Brand	<i>Kappahl</i>	Open text (brief)	The primary brand of the product, and typically the brand on the label.
Supply chain information	200,00	Supplier Name	<i>COTTON DIVISION</i>	Open text (brief)	The name of the company operating the specific manufacturing facility where production took place.
Product information	300,00	Product Identification Systems	<i>GTIN</i>	Text (fixed format)	The Product ID system a brand uses to uniquely identify a product that will be digitized. Today, companies use different systems for identifying their products, such as GTIN, SKU, or Style Numbers.
Material information	350,00	Component	<i>Body fabric, trim, lining fabric, etc</i>	Text (from standard list)	Part of the product that is being described with info about material type, fiber composition, recycled content, etc.
Digital identifier	370,00	Data Carrier/Identifier Type	<i>RFID thread, NFC chip, QR code, etc.</i>	Text (from standard list)	The type of physical data carrier attached to the product
Care information	400,00	Care Image	<i>Care icons image</i>	Image (format?)	Image of care icons
Compliance information	500,00	Harmful Substances	Yes / No	Open text (brief)	The presence of harmful substances must be disclosed with the mention "contains a harmful substance" if said substance is present at a concentration higher than 0.1% (in weight) in the product. The statement is followed by the name of all the harmful substances present in the product. French Decree No. 2022-748; Art. R. 541-221.IX
Circularity information	600,00	Performance	TBC	TBC	TBC
Sustainability information	650,00	Circular, Sustainable, Social Brand Statement	<i>The [company name] Foundation uses philanthropic resources to find, fund and facilitate disruptive innovations, initiatives and research that enable a socially inclusive and planet positive textile industry.</i>	Open text (multi-line)	Information provided about circular, sustainable, and social practices in place, as written by the brand. Excludes certifications on product. This information is guided by the Green Claims Directive.

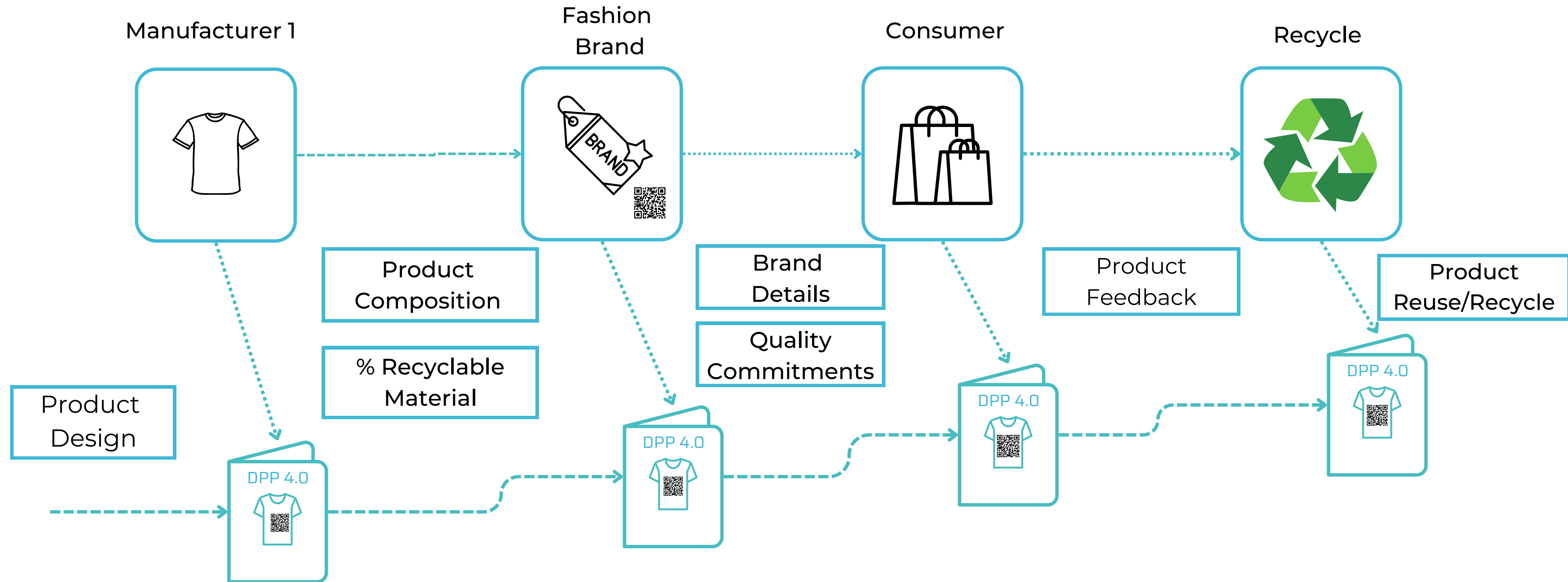
Info Group	Item Number	Data Field Name	Examples	Data Format	Definition
Brand information	100,00	Brand	<i>Kappahl</i>	Open text (brief)	The primary brand of the product, and typically the brand on the label.
Brand information	101,00	Logo	<i>Logo visual</i>	Image (png, jpeg)	Brand logo
Brand information	102,00	Sub Brand	<i>Marimekko Kioski</i>	Open text (brief)	Brands may have sub-brands under which products are sold, often with different garment labels and/or sold within specialty collections or campaigns.
Brand information	103,00	Parent Company	<i>ABC Holdings</i>	Open text (brief)	The full name of the registered business entity who puts the product on the market, or if it exists, the parent company of the primary brand of the product.
Brand information	104,00	Trader	<i>Zalando</i>	Open text (brief)	Name of the company putting the product on the market. This can be the brand or another company.
Brand information	105,00	Trader Location	<i>100 AVENUE DU GENERAL LECLERC - France</i>	Text (fixed format)	The physical address of the trader company.
Supply chain information	200,00	Supplier Name	<i>COTTON DIVISION</i>	Open text (brief)	The name of the company operating the specific manufacturing facility where production took place.
Supply chain information	201,00	Supplier Location	<i>100 AVENUE DU GENERAL LECLERC - France</i>	Text (fixed format)	The physical address of the manufacturing facility where production took place.
Supply chain information	202,00	Facility Registry	<i>GLN OSH</i>	Text (fixed format)	The name of the registry used to identify the specific value chain facility where production took place (e.g. OSH, GLN, etc) May be the same as Operator Registry
Supply chain information	202,10	Facility Identifier	<i>FR202206770RY8G</i>	Text (fixed format)	The number in the registry used to identify the specific manufacturing facility where production took place (e.g. OSH, GLN, etc) May be the same as Operator Identifier
Supply chain information	203,00	Operator Registry	<i>GLN</i>	Text (fixed format)	The name of the registry used to identify the operator involved in specific value chain steps (e.g. OSH, GLN, etc) May be the same as Facility Registry
Supply chain information	203,10	Operator Identifier	<i>4066837000008</i>	Text (fixed format)	The number in the registry used to identify the operator involved in specific value chain steps (e.g. OSH, GLN, etc) May be the same as Facility Identifier
Supply chain information	204,00	Country of Origin - Confection	<i>China Portugal Taiwan Vietnam</i>	Text (from standard list)	The country in which the final product was manufactured
Supply chain information	205,00	Country of Origin - Dyeing and Printing	<i>China Portugal Taiwan Vietnam</i>	Text (from standard list)	The country in which the final product was manufactured
Supply chain information	206,00	Country of Origin - Weaving and Knitting	<i>China Portugal Taiwan Vietnam</i>	Text (from standard list)	The country in which the final product was manufactured

Info Group	Item Number	Data Field Name	Examples	Data Format	Definition
Product information	300,00	Product Identification Systems	<i>GTIN</i>	Text (fixed format)	The Product ID system a brand uses to uniquely identify a product that will be digitized. Today, companies use different systems for identifying their products, such as GTIN, SKU, or Style Numbers.
Product information	300,10	Product Identification Value	<i>56123965435465</i>	Text (fixed format)	The value associated with the Product ID system a brand uses to identify a style or SKU.
Product information	300,20	Unique Product ID	<i>Serialized GTIN (See GS1 guidance for specifics)</i>	Text (fixed format)	The unique identification number assigned to individual products. With this, a single item can be differentiated from others under the same SKU, style number, GTIN, etc.
Product information	301,00	Product Name	<i>Eloisasti Koukero</i>	Open text (brief)	A unique, short name that is given to each product by the brand
Product information	302,00	Consumer-Facing Description	<i>The Eloisasti knitted wool vest has a relaxed, straight fit and it features the Koukero pattern. The vest has a double-ribbed O-neck and dropped sleeve openings. The hemline has wide ribbing and side slits.</i>	Open text (multi-line)	The brief consumer-facing description of the product, which lists essential properties and is often used as the primary description for e-commerce
Product information	303,00	Photo	<i>Photo of item</i>	image	Product images
Product information	304,00	Article Number	<i>3132001-9999</i>	Text (fixed format)	Style number + color number
Product information	304,10	Item Number	<i>3132001-9999-XS</i>	Text (fixed format)	Style number + color number + size
Product information	305,00	PO Number	<i>PO 26032023-03402</i>	Text (fixed format)	Unique Purchase Order Number assigned to a specific transaction
Product information	306,00	Commodity Code System	<i>HS code</i>	Open text (multi-line)	Legal commodity code system used for international trade
Product information	306,10	Commodity Code Number	<i>6203 620342 62034231</i>	Open text (single-line)	Legal commodity code number used for international trade
Product information	307,00	Year of Intended Sale (New)	<i>2022</i>	Number (fixed format)	The year in which the product will be (was) originally marketed and sold
Product information	307,10	Season of Intended Sale (New)	<i>SP/SU</i>	Text (from standard list)	The season in which the product will be (was) originally marketed and sold
Product information	308,00	Price Currency	<i>USD EUR GBP</i>	Text (fixed format)	Standard currency code for price information
Product information	308,10	MSRP	<i>265,55</i>	Number (fixed format)	The Manufacturer Suggested Retail Price (MSRP), which is the intended full price of the product as established by the brand
Product information	308,20	Resale Price	<i>185,15</i>	Number (fixed format)	The price of the item when sold for reuse
Product information	309,00	Size	<i>38 ---- M</i>	Open text (brief)	The size of the garment as listed on the garment label

DPP HAS CLEAR MANDATES IN TERMS OF TECHNICAL AND DATA MODEL REQUIREMENTS - ARTICLE 8 - 10

- DPP represents a unique identifier capable of storing and sharing information along a complete lifecycle in a fully decentralized approach
- The globally unique identifier should follow ISO/IEC 15459 Standard
- The DPP should be extendable and transferable enabling each party along the Horizontal value chain to enhance information from Design to Recycling or Reuse
- The data element requirement for DPP is not fixed with the potential addition of data fields like Carbon foot print and energy requirements - Demanding need for high flexibility to the Data model framework
- All information contained in the product passport shall be based on open standards and shall be machine-readable, structurable and searchable.
- DPP should be interoperable referring to the ability of different systems, techniques or organizations to interact.
- DPP should allow specific access rights at the level of the defined product groups in the delegated acts

REGULATIONS WOULD BECOME A KEY OPPORTUNITY FOR EARLY ADOPTERS



TWO ARCHITECTURE MODELS TO ENABLE DPP

Build your Own
Like Luxury Brands



STELLA MCCARTNEY



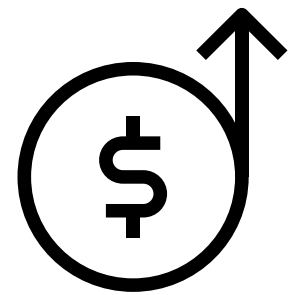
DPP as a
Service



WHY INDUSTRYAPPS

→ IndustryApps

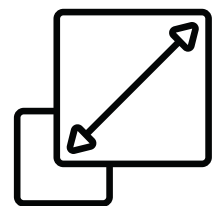
Build your own



EXPENSIVE DEVELOPMENT



STATIC FUNCTIONS & FEATURES

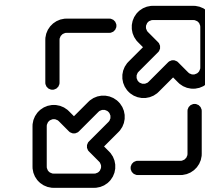
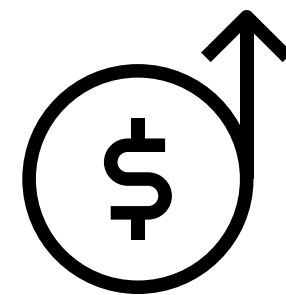


HIGH COST OF SCALE

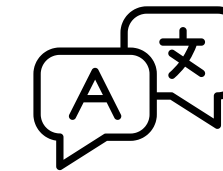
Avery Dennison



STATIC FUNCTIONS & FEATURES
CHANGES / ADAPTATIONS
EXPENSIVE



OPEN / DYNAMIC DATA MODEL



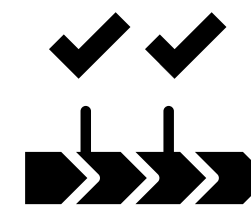
SEMANTICS IN 15 GLOBAL LANGUAGES



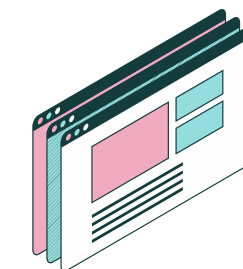
EDGE/CLOUD/HYBRID



ADD SERVICES TO DPP
INTEGRATE AI FOR NEW CAPABILITIES



ONBOARD SUPPLIERS



CREATE YOUR OWN UI

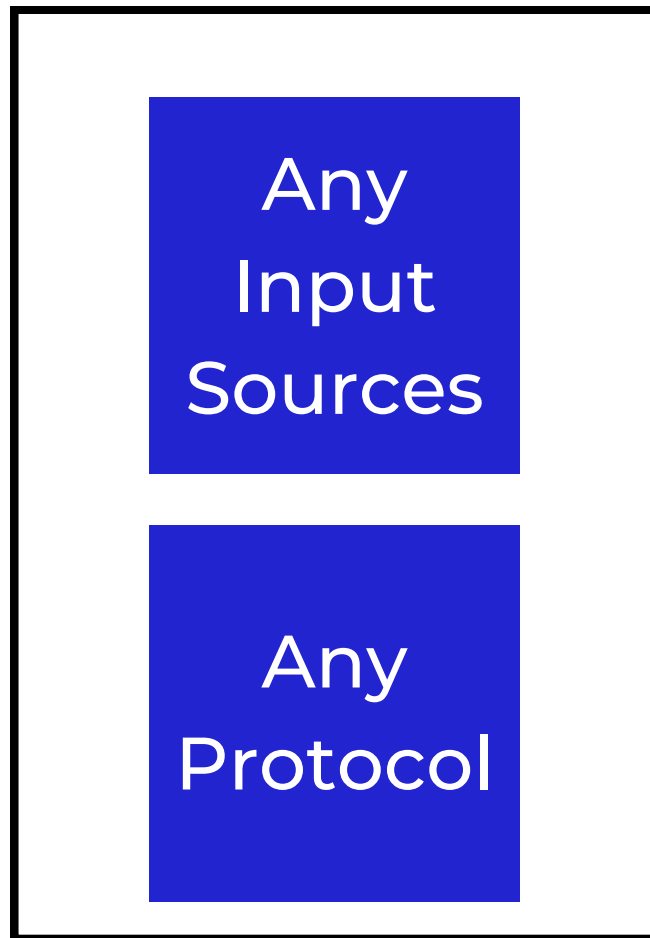
BENEFITS OF INDUSTRYAPPS

- Achieve regulatory compliance without complex, expensive IT projects.
- Compile data from value chain partners - No need for data centralization.
- Automate data collection from machines and processes.
- Define Public/Private data access - Granular authorization control
- Flexibility to have your UI/UX.
- Ability to add services for reuse/recycling.
- Extend DPP with digital customer services - Integrated e-commerce.
- Integrate with existing shop floor systems - MES, OT systems.
- Automate data collection by simply subscribing to solutions from IndustryApps.
- Integrate with existing labelling systems - RFID/NFC/QR Code.
- Dynamically add services - Start simple, extend services later.

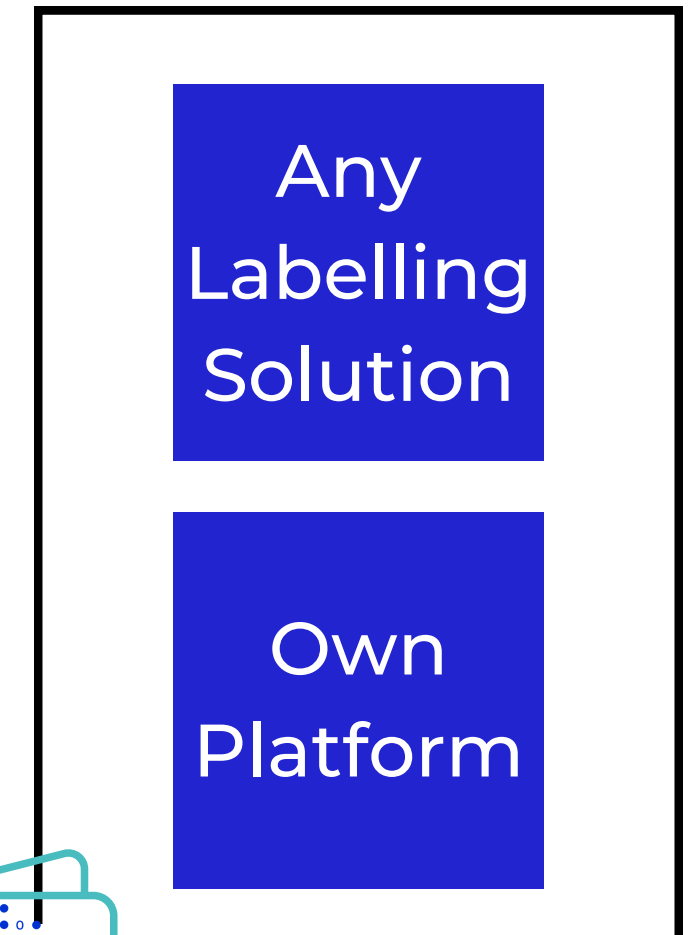
COMPLIANT - OPEN - FLEXIBLE - COST EFFECTIVE

A comprehensive platform for Textile DPP

Manufacturer

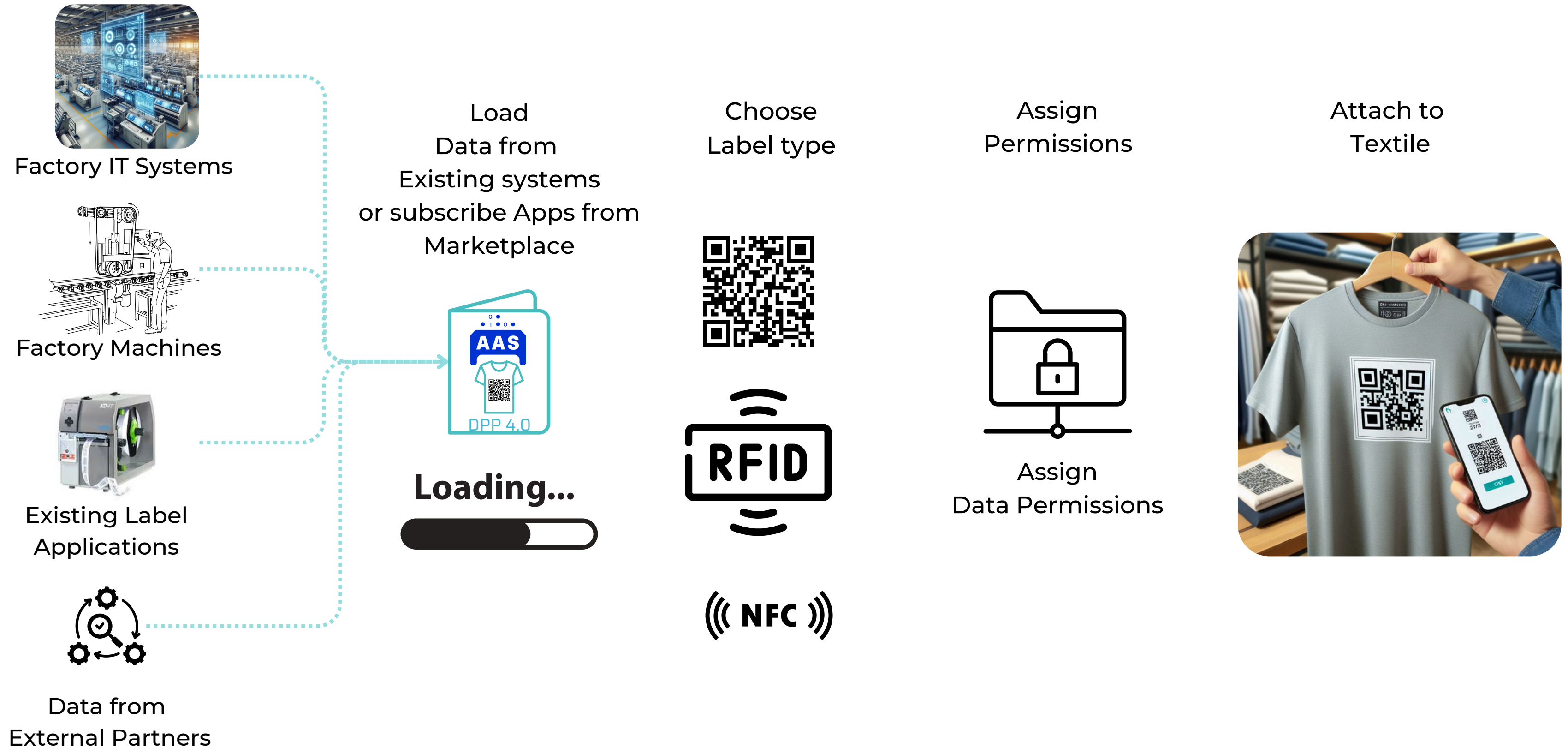


Fashion Brand



A PLATFORM STRATEGY FOR DPP

4 STEPS TO COMPLIANT DPP



Groz-Beckert (Opportunities)

- DPP offered as a service under GB Digital Solutions
- Open to all customers - Irrespective if they use GB Needles or not
- Most Textile customers have limited Digital Systems but would need to adhere to the regulations.
- The classical approach of building its own DPP systems will be cost-prohibitive.
- For GB Customers - DPP creation can be automated to a large sense (Based on Needle type)
 - MATERIAL TYPE
 - STITCH
 - MANUFACTURER ADDRESS
- GB customers also would have access to a suite of additional applications for data collection
- A QR Code creation and integration with their existing labelling solution would allow automation of processes with no additional overhead for DPP
- Groz-Beckert could use the network of system integrators under IndustryApps to not just deliver but deploy these technology at Shopfloor
- Open data structure and flexible data injection approach allows any factory to achieve DPP irrespective of their current Digital maturity

TEXTILE DPP TEMPLATES



DPP: URI ↓

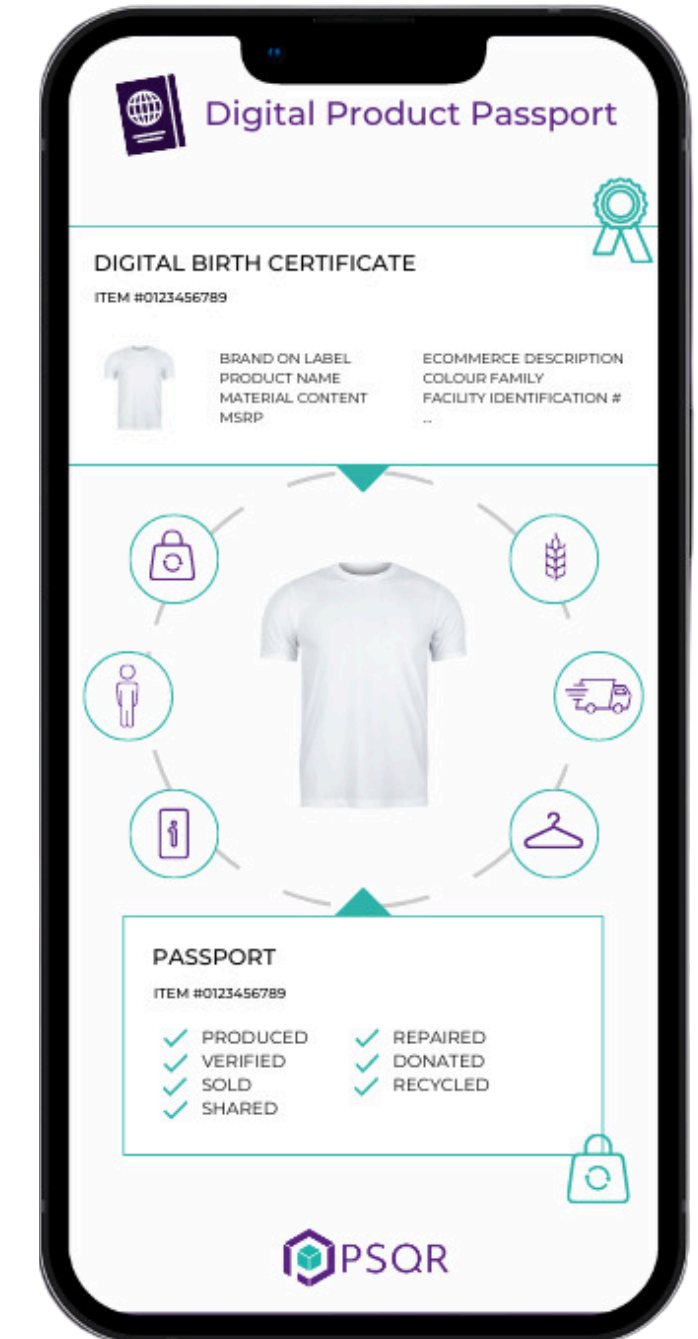
Product Name : BLS38T
 Brand: XYZ
 Color: BLACK
 Fabric/ Seams: COTTON 65%. PL 35%
 Non Eco Chemicals: 0%

Product Code
PS-7671121

CERTIFICATION

TRACEABILITY

EXTEND





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