



Study results of stakeholders' perspective on the data gathering effort vs. value of information requirements

Application to the textiles and electronics value chains

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AGENDA

Approach



Who was surveyed (stakeholder)?



What was evaluated?



Which information was evaluated?

Results

- Most relevant information
- Information subject to technical and structural barriers
- Relevant information per stakeholder which are not yet mandatory



Approach

Survey approach: (1) who was surveyed?

Responses data provider

Electronic sector: 139

Textile sector : 153



Data provider

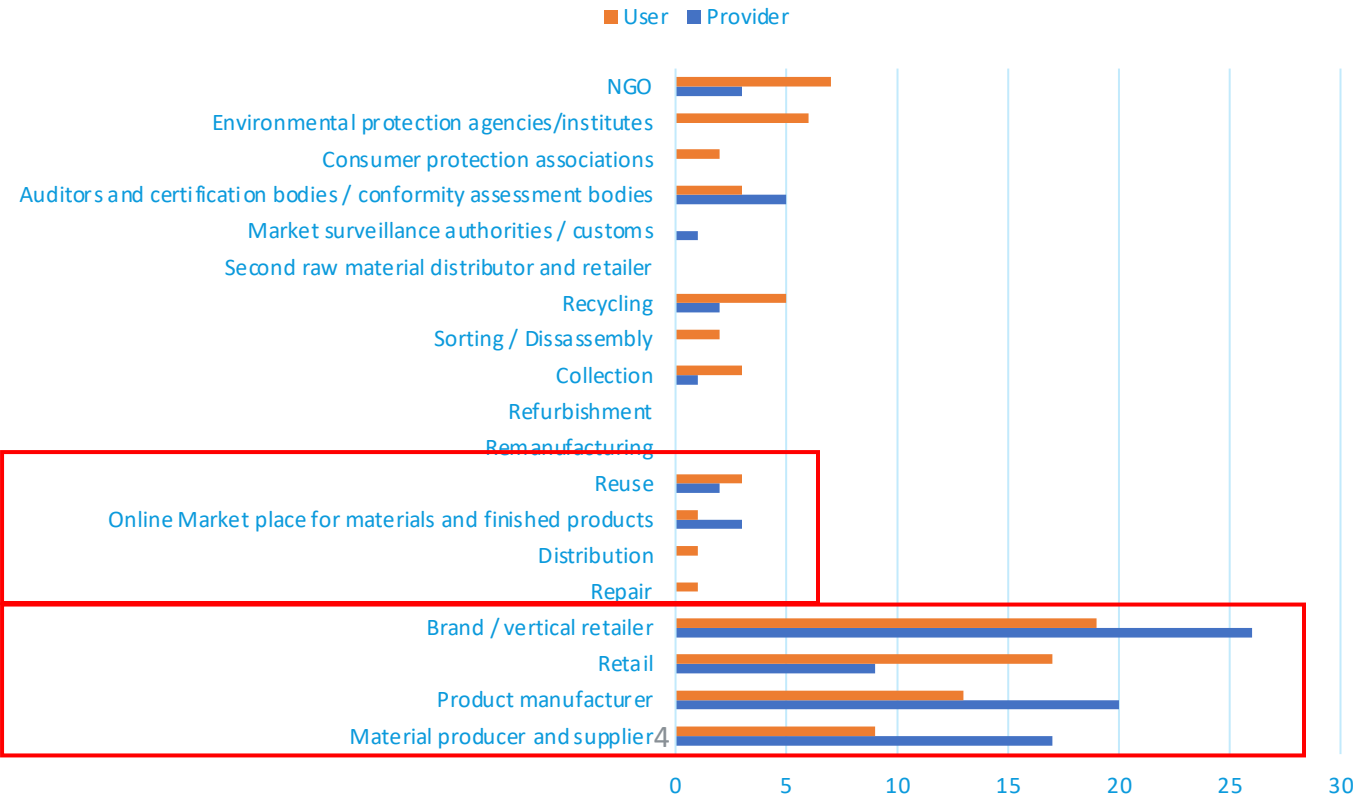


Data user

Responses data user

Electronic sector: 97

Textile sector: 180



Survey approach: (1) who was surveyed?

Responses data provider

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Data provider

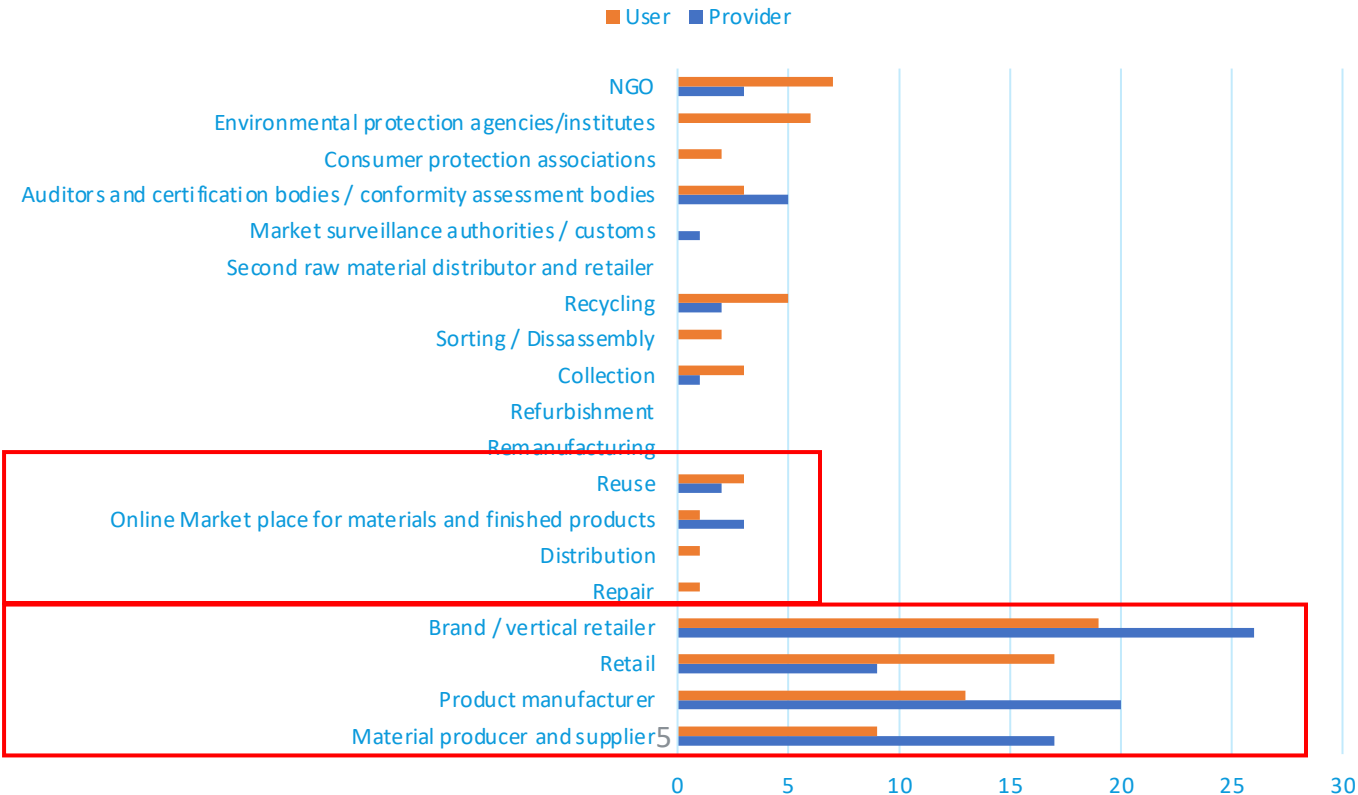


Data user

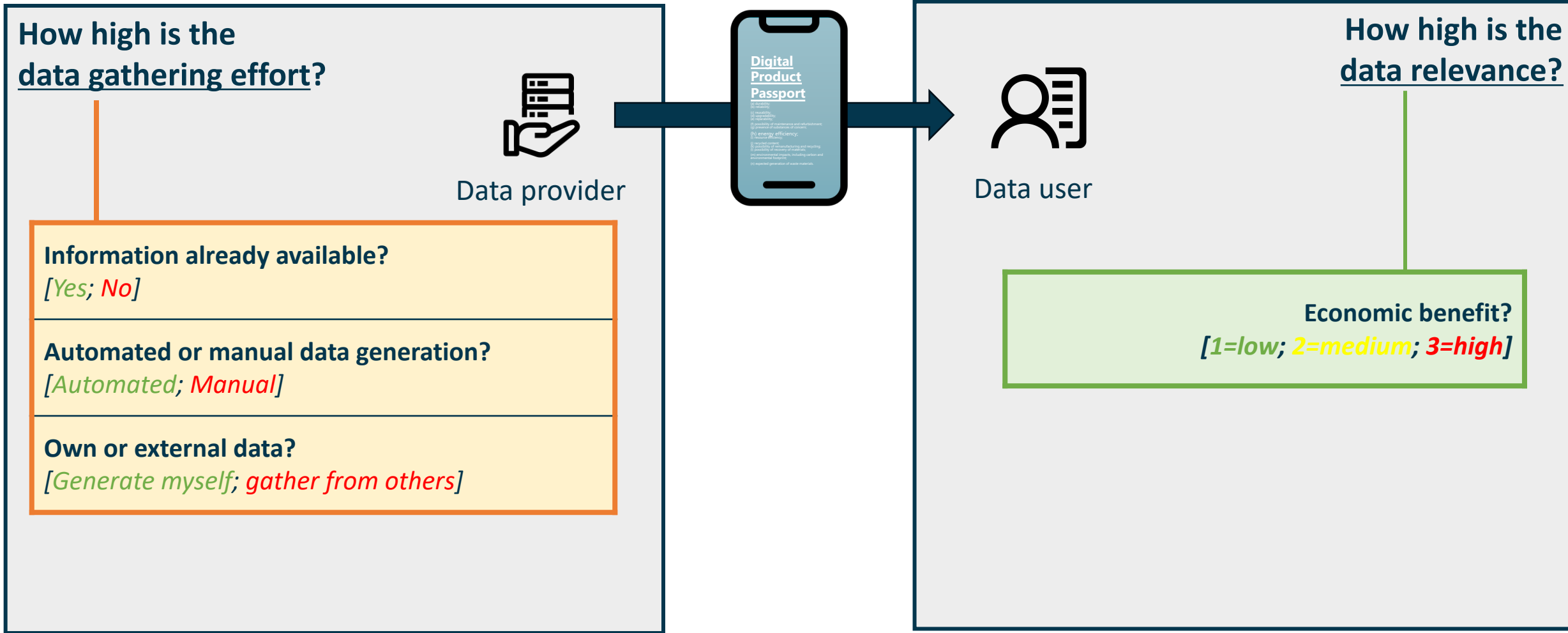
Responses data user

Electronic sector: 97

Textile sector: 180



Survey approach: (2) what was evaluated?



Survey approach: (3) which information was evaluated?

	Electronic	Textile
Information required by ESPR & other legal acts (Ecodesign legislation, WEEE, Textile Regulation)	25	10
*Information identified in JRC priority product study / ESPR Article 7 (sustainable sourcing, durability, recycled content, lightweight design, recyclability)	21	21
Other potentially relevant information (as identified in D2.1)	37	29
Total	73	60

Survey approach: (3) which information was evaluated?

Information categories
Product identification
Company identification
Material information
Functional and technical specifications
Product design and service
Downstream information
Certification and label
* Product energy and resource efficiency
* Sustainable sourcing
* Lightweight design
* Recycled content
* Generation of waste materials
* Durability/Repairability
* Recyclability

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* Lightweight design
* Recycled content
* Generation of waste materials
* Durability/Repairability
* Recyclability

- The **name of the substances of concern** present in the product (ESPR Article 7 (5))
- The **location of the substances of concern** within the product (ESPR Article 7 (5))
- The **concentration**, maximum concentration or concentration range **of the substances of concern**, at the level of the product, its main components, or spare parts (ESPR Article 7 (5))
- Information according to RoHS Directive 2011/65/EU; (Declaration of conformity)
Information requirements according to REACH, Article 31 on **hazardous, persistent, bioaccumulative and toxic substances**

Other potentially relevant information (as identified in D2.1)	37	29
Total	73	60

- **Information** according to ESPR Article 7 2 (b) (ii) for consumers and other end-users on **how to install, use, maintain and repair the product**
- **Information** according to ESPR Article 7 2 (b) (iii) for treatment facilities on **disassembly, recycling, or disposal at end-of-life;**

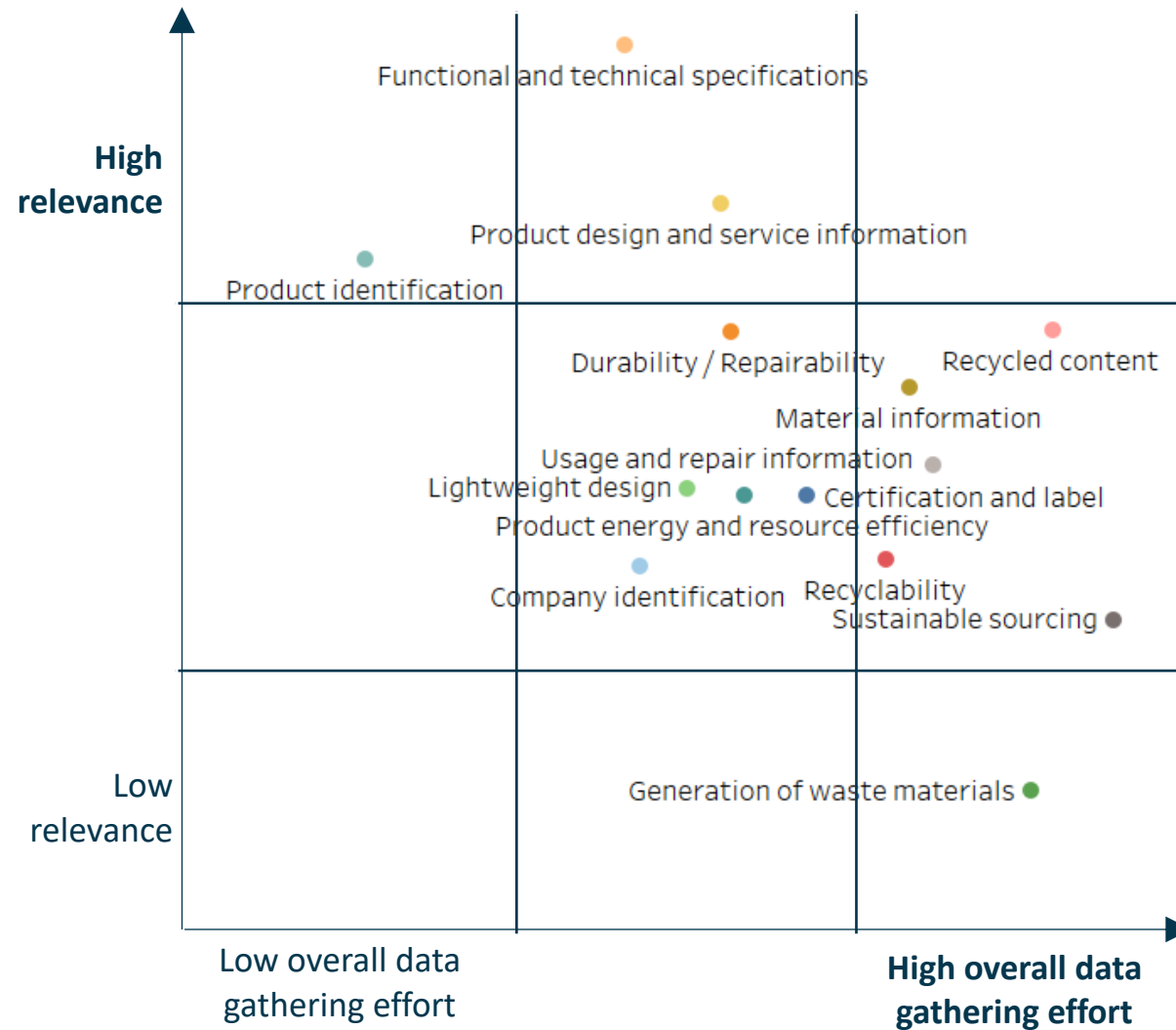
- **Material consumption** associated to the production
- **Energy consumption** associated to the production
- **GHG emissions** associated to production
- GHG emissions associated to the product



Results

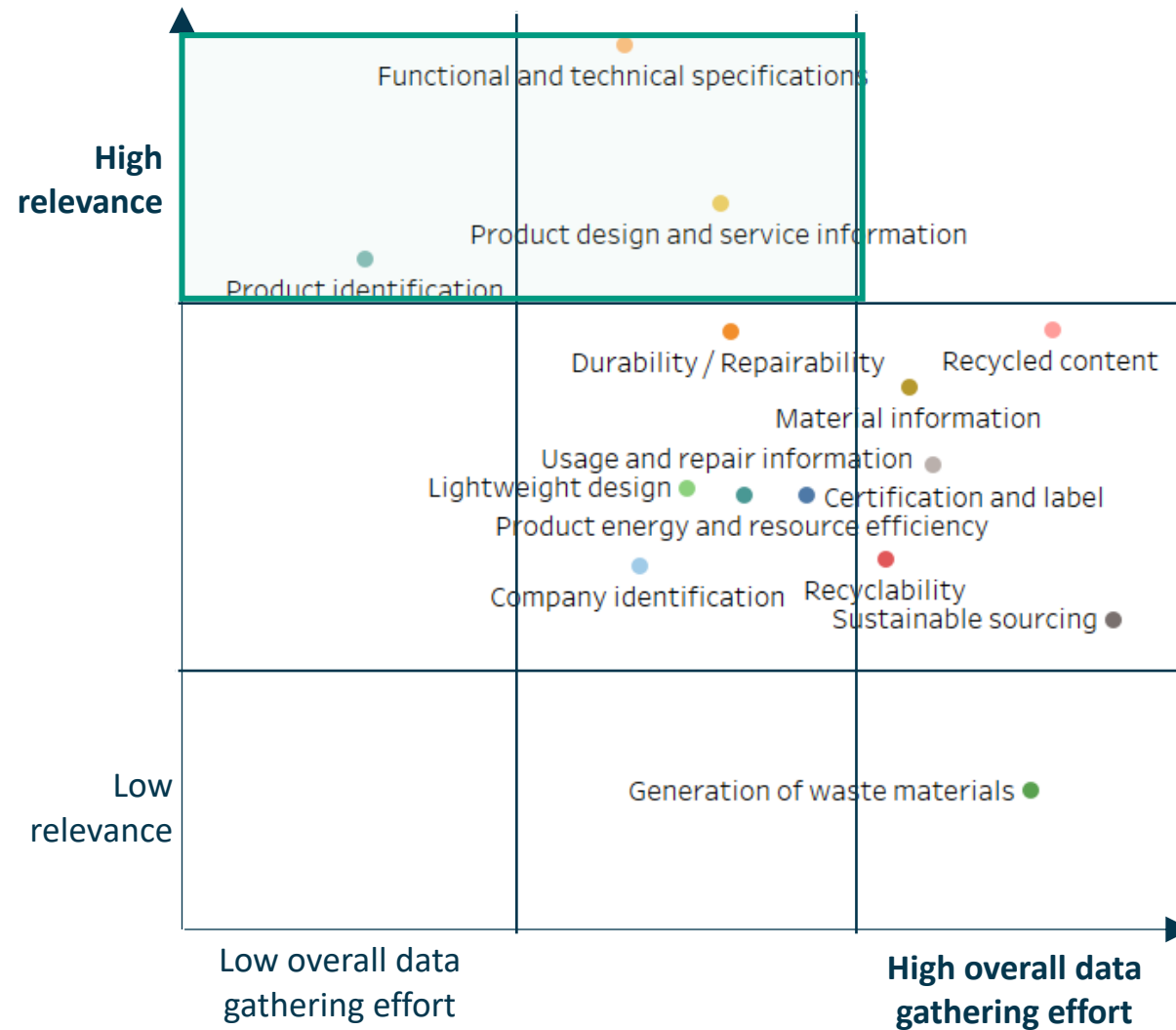
Information categories: Relevance vs. gathering effort

Electronic sector



Information categories: Relevance vs. gathering effort

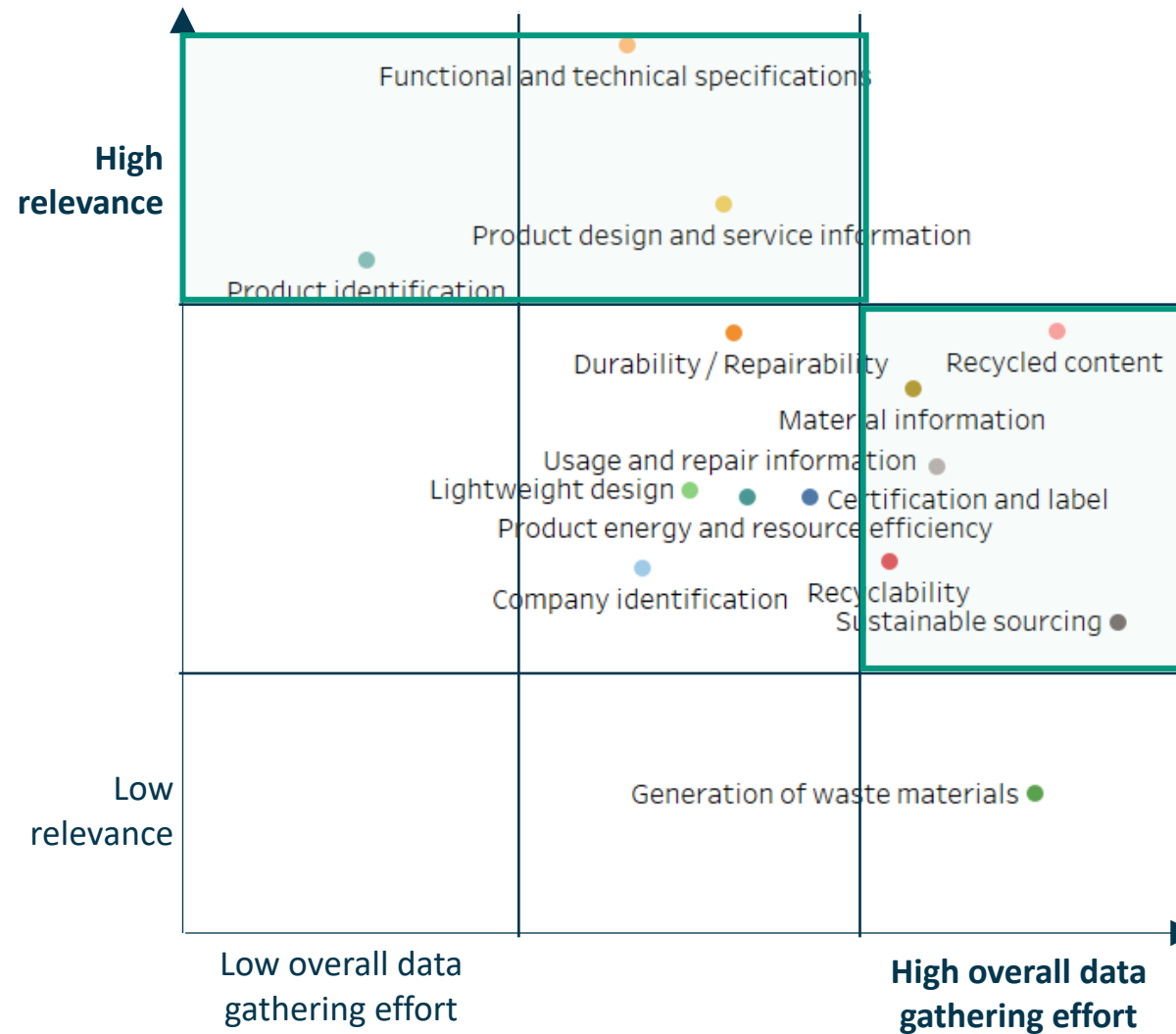
Electronic sector



- Adoption of information that is most relevant and rather simple to generate

Information categories: Relevance vs. gathering effort

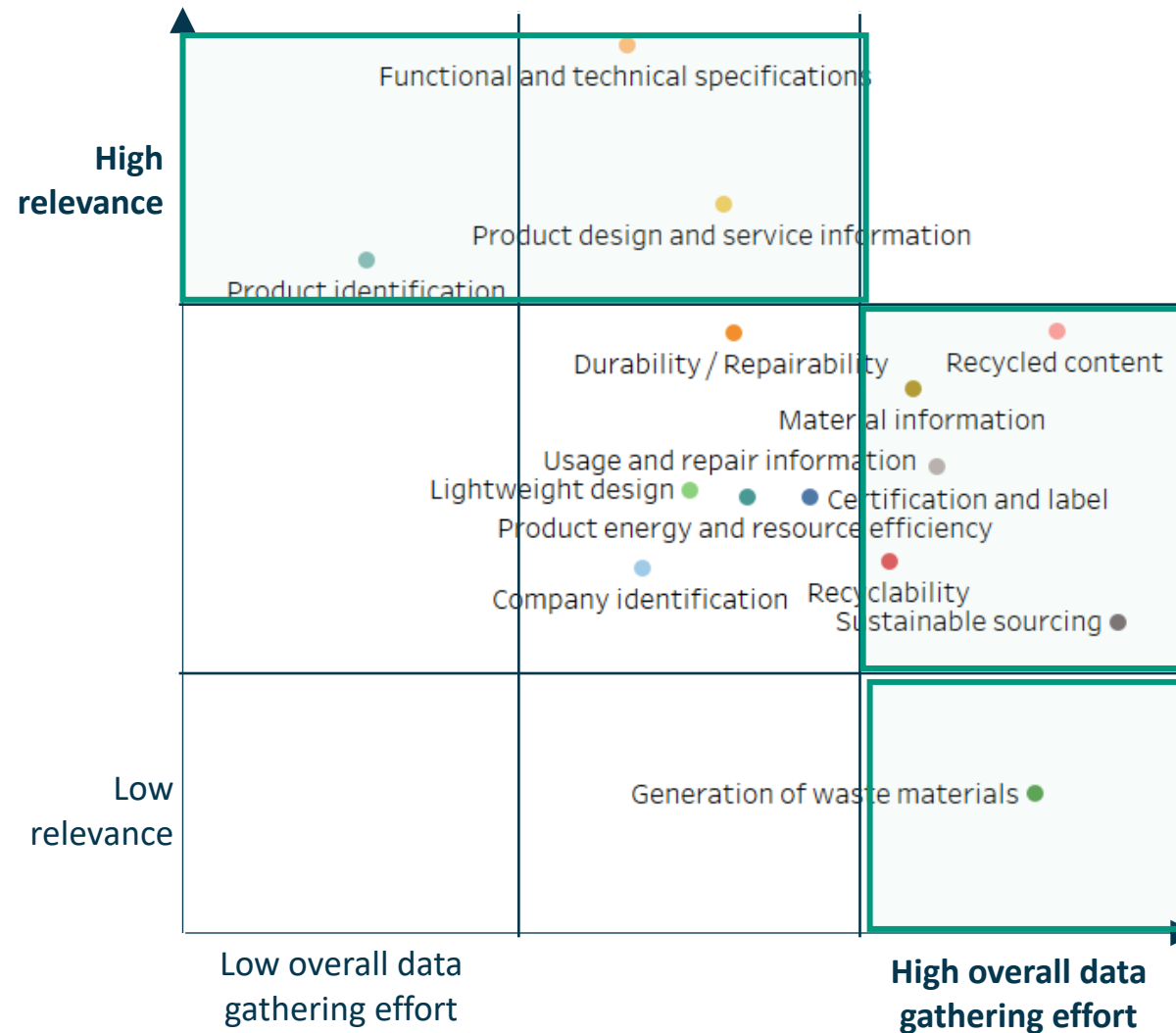
Electronic sector



- Adoption of information that is most relevant and rather simple to generate
- Support for information of high data generation effort

Information categories: Relevance vs. gathering effort

Electronic sector



- Adoption of information that is most relevant and rather simple to generate
- Support for information of high data generation effort
- Communication of usefulness of information that is low relevance

Top 25 relevant information + gathering effort

Electronic sector

Information category	Information	Effort	Benefit
Product identification	Product images	High data gathering effort	
	*Unique product identifier at the level indicated in the applicable delegated act (e.g, serial number ..	Low data gathering effort	
	Retail information (product name, category, type, brand)	Low data gathering effort	
	Model number (according to own standards)	Low data gathering effort	
	Serial number (according to own standards)	Low data gathering effort	
	Date of product manufacturing	Low data gathering effort	
Company identification	*Information related to the manufacturer, such as its unique operator identifier	Low data gathering effort	
Material information	Information requirements according to REACH, Article 31 on hazardous, persistent, bioaccumulati..	High data gathering effort	
	Information according to RoHS Directive 2011/65/EU; (Declaration of conformity (CE-Marking))	High data gathering effort	
	*Relevant instructions for the safe use of the product (ESPR Article 7 (5))	High data gathering effort	
Functional and technical specifications	Product information sheet (on energy consumption & performance according to Energy Labelling R..	High data gathering effort	
	Technical documentation (according to Energy Labelling Regulation)	High data gathering effort	
	Individual specification of product functions (e.g, screen size, camera resolution)	High data gathering effort	
Product design and service information	Extended repair information incl. disassembly instructions, component map, wiring diagrams etc	High data gathering effort	
	Minimum guarantee offered	Low data gathering effort	
	*Information according to ESPR Article 7 2 (b) (ii) for consumers and other end-users on how to ins..	High data gathering effort	
	Identification of WEEE collection group (according to WEEE Directive ANNEX III)	Low data gathering effort	
Usage and repair infor..	Repair date	High data gathering effort	
Certification and label	Product certification	High data gathering effort	
Durability / Repairability	**Modularity, transformability, detachable/adjustable elements	High data gathering effort	
	**Spare part availability	High data gathering effort	
	**Possible lifetime of the product	High data gathering effort	
	**Spare part delivery time	High data gathering effort	
	**Disassembly related to skill level	High data gathering effort	
Recycled content	**Recycled content in product	High data gathering effort	

Top 25 relevant information + gathering effort

Electronic sector

- **Product identification** important and rather easy to generate

- **Material information:** most relevant information is also already mandatory

- **Durability/Repairability** important but rather difficult to gather

Information category	Information	Benefit
Product identification	Product images	High data gathering effort
	*Unique product identifier at the level indicated in the applicable delegated act (e.g, serial number ..)	Low data gathering effort
	Retail information (product name, category, type, brand)	Low data gathering effort
	Model number (according to own standards)	Low data gathering effort
	Serial number (according to own standards)	Low data gathering effort
	Date of product manufacturing	Low data gathering effort
Company identification	*Information related to the manufacturer, such as its unique operator identifier	Low data gathering effort
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Usage and repair infor..	Repair date	High data gathering effort
Certification and label	Product certification	High data gathering effort
Durability/ Repairability	**Modularity, transformability, detachable/adjustable elements	High data gathering effort
	**Spare part availability	High data gathering effort
	**Possible lifetime of the product	High data gathering effort
	**Spare part delivery time	High data gathering effort
	**Disassembly related to skill level	High data gathering effort
Recycled content	**Recycled content in product	High data gathering effort

Top 25 relevant information + gathering effort

Electronic sector

- **Product identification** important and rather easy to generate

- **Material information:** most relevant information is also already mandatory

- **Durability/Repairability** important but rather difficult to gather

Information category	Information	Benefit
Product identification	Product images	High
	*Unique product identifier at the level indicated in the applicable delegated act (e.g, serial number ...)	High
	Retail information (product name, category, type, brand)	Medium
	Model number (according to own standards)	Medium
	Serial number (according to own standards)	Medium
	Date of product manufacturing	Medium
Company identification	*Information related to the manufacturer, such as its unique operator identifier	Medium
Material information	Information requirements according to REACH, Article 31 on hazardous, persistent, bioaccumulati..	High
	Information according to RoHS Directive 2011/65/EU; (Declaration of conformity (CE-Marking))	High
	*Relevant instructions for the safe use of the product (ESPR Article 7 (5))	Medium
Functional and technical specifications	Product information sheet (on energy consumption & performance according to Energy Labelling R..	High
	Technical documentation (according to Energy Labelling Regulation)	High
	Individual specification of product functions (e.g, screen size, camera resolution)	High
Product design and service information	Extended repair information incl. disassembly instructions, component map, wiring diagrams etc	Very High
	Minimum	Medium
	*Inform	High
Usage and repair infor..	Identific	Medium
	Repair d	High
Certification and label	Product certification	High
Durability/Repairability	**Modul	High
	**Spare	High
	**Possib	High
	**Spare	High
	**Disassembly related to skill level	High
	**Recycled content in product	High
Recycled content	**Recycled content in product	High

- Already available: 40%
- Manual data gathering: 100%
- Data needs to be gathered from others: 22%

- Already available: 31%
- Manual data gathering: 100%
- Data needs to be gathered from others: 58%

Top 25 relevant information + gathering effort

Textile sector

- **Material information:** medium relevance and data gathering effort
- **Product identification** important and rather easy to generate
- **Recyclability and recycled content** important but difficult to gather

Information category	Information	
Certification and label	Product certification	
	Material certification	
Material information	Material composition (according to Textile Regulation; identification of materials above 15-5% ..	
	Substance of concern name, location within the product, concentration at the level of the produ..	
	Choice of materials and restrictions on substances (eg. Combination of fibers, flame retardants))	
	Identification of substances (name, location, concentration) according to other lists e.g. AFIRM,..	
	Declaration of compliance e.g. with AFIRM, ZDHC MRSL	
	Fabric type	
	Detailed chemical content	
	Color group, color description, color system information (Pantone, Coloro, etc.), numerical colo..	
Fabric construction type		
Product identification	Unique product identifier at the level indicated in the applicable delegated act (e.g. serial numb..	
	Retail information (product name, category, type, brand)	
	Product traceability (date, location, operators)	
	Product images	
	Production year (Season or/and year of sale)	
	Product care instructions	
	Size (in regional context e.g. in EU, FR, IT, US size)	
	Product code as provided for in standard ISO/IEC 15459-6 or equivalent of products or their par..	
Recyclability	Identification of product design elements that inhibit circularity (e.g. prints harder to recycle)	
	Recycling stream category (waste type)	
	Ability to separate the product into different materials	
Recycled content	Min content of PCR material in product	
	Min content of PCR material in packaging	
Sustainable sourcing	Sustainable design & services options (e.g. designed for repair, reuse, recycling ... R-Strategies)	
Usage and repair inf..	Purchase date	

Structural and technical barriers

Textile sector

Information category	Category	Technical barrier (manual data gathering)	Structural barrier (external data)
Sustainable sourcing	**Traceability of materials across the supply chain applicable to different intermediated product groups (limited to the intermediate products (incl, chemicals) and ceramic products),	79%	93%
Usage and repair information	Possible lifetime of the textile or footwear	75%	92%
Recyclability	**Condition for the access to product data relevant for the the recycling, including dismantling information	75%	92%
Product energy and resource efficiency	**GHG emissions associated to the washing and drying operations of a clothing item	75%	92%
Product energy and resource efficiency	**Energy consumption associated to the washing and drying operations of a clothing item	78%	92%

Electronic sector

Information category	Category	Technical barrier (manual data gathering)	Structural barrier (external data)
Material information	*Materials that inhibit circularity	100%	70%
Sustainable sourcing	**Traceability of materials across the supply chain applicable to different intermediated product groups (limited to the intermediate products (incl, chemicals) and ceramic products),	89%	70%
Material information	*The concentration, maximum concentration or concentration range of the substances of concern, at the level of the product, its main components, or spare parts (ESPR Article 7 (5))	91%	67%
Usage and repair information	Date product becomes waste (waste collection date)	88%	67%
Recycled content	**Recycled content in packaging	100%	60%



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Top 5 relevant information per stakeholder group



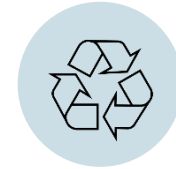
Distribution/
Retail



Consumer



Repair, reuse



Collection,
sorting

High effort (top 30%)
***Not yet mandatory

<p>Electronics</p>	<ul style="list-style-type: none"> • Technical documentation • Product information • ***Product images • ***Individual specification of product functions • ***Retail information 	<ul style="list-style-type: none"> • Product information sheet • ***Individual specification of product functions • ***Minimum guarantee offered • Technical documentation • ***Repair date 	<ul style="list-style-type: none"> • ***Repair date • Unique product identifier at the level indicated in the applicable delegated act • ***Product images • ***Model number • Extended repair information 	<ul style="list-style-type: none"> • Extended repair information • Information requirements according to REACH (Art. 31) • Information according to RoHS • Information for treatment facilities on EoL • Identification of WEEE collection group
<p>Textile</p>	<ul style="list-style-type: none"> • ***Product images • ***Retail information • Unique product identifier at the level indicated in the applicable delegated act • ***Product traceability • ***Production year 	<ul style="list-style-type: none"> • ***Product care instructions • ***Product images • ***Product size • ***Retail information • Material composition 	<ul style="list-style-type: none"> • Unique product identifier at the level indicated in the applicable delegated act • Material composition • ***Production year • Sustainable design & services options • ***Retail information 	<ul style="list-style-type: none"> • Unique product identifier at the level indicated in the applicable delegated act • ***Choice of materials and restrictions on substances • Material composition • Identification of product design elements that inhibit circularity • Ability to separate the product into different materials





Thank you!

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Conclusions

- Structural barrier (manual data gathering)
 - Material information, documentations, certification and label
 - → Semantics, structuring, API, etc.
- Technical barrier (data gathering from external stakeholder e.g. supplier)
 - Material information, certification and label, downstream information
 - → Transition time in legislation
- Information required by ESPR often not available and of high gathering effort
- Information which already exist (RoHS, REACH, Ecodesign) is rather available, still of high gathering effort

Which mandatory information are not seen relevant?

- Information rated with lowest relevance (bottom 20)

Material information	*The concentration, maximum concentration or concentration range of the substances of concern, at the level of the product, its main components, or spare parts (ESPR Article 7 (5))
Company identification	The unique facility identifiers referred to in Annex III, point (i), compliant with the ISO/IEC standard 15459:2015"
Company identification	The unique operator identifiers referred to in ESPR Annex III, points (g) and (h), compliant with the ISO/IEC standard 15459:2015"
Product identification	*Relevant commodity codes, such as a TARIC code as defined in Council Regulation (EEC) No 2658/871
Company identification	Assembly line number (according to own standards)

Structural and technical barriers

Category

Extended repair information incl. disassembly instructions, component map, wiring diagrams etc

Product images

Unique product identifier at the level indicated in the applicable delegated act (e.g, serial number on item level)

Information requirements according to REACH, Article 31 on hazardous, persistent, bioaccumulative and toxic substances

Information according to RoHS Directive 2011/65/EU; (Declaration of conformity (CE-Marking))

Product information sheet (on energy consumption & performance according to Energy Labelling Regulation)

Retail information (product name, category, type, brand)

Model number (according to own standards)

Technical documentation (according to Energy Labelling Regulation)

Individual specification of product functions (e.g, screen size, camera resolution)

Repair date

Modularity, transformability, detachable/adjustable elements

Serial number (according to own standards)

Recycled content in product

Date of product manufacturing

Information according to ESPR Article 7 2 (b) (ii) for consumers and other end-users on how to install, use, maintain and repair the product in order to minimise its impact on the environment and to ensure optimum durability, as well as on how to return or dispose of the product at end-of-life;

Relevant instructions for the safe use of the product (ESPR Article 7 (5))

Minimum guarantee offered

Spare part availability

Possible lifetime of the product

Disassembly related to skill level

Spare part delivery time

Product certification

Identification of WEEE collection group (according to WEEE Directive ANNEX III)

Information related to the manufacturer, such as its unique operator identifier

Information relevant for disassembly (ESPR Article 7 (5))

Structural barrier	Technical barrier
22%	100%
6%	71%
28%	18%
44%	69%
39%	71%
11%	76%
13%	23%
7%	50%
0%	94%
7%	93%
43%	85%
8%	100%
13%	15%
18%	15%
42%	100%
0%	71%
6%	93%
15%	100%
0%	83%
21%	85%
8%	77%
33%	33%
10%	100%
31%	83%
0%	58%
9%	91%

Structural and technical barriers

Information	Technical barrier (manual data)	Structural barrier (external data)
Unique product identifier at the level indicated in the applicable delegated act (e.g. serial number on item level)	44,44%	38,46%
Material composition (according to Textile Regulation; identification of materials above 15-5% content)	23,53%	19,05%
Retail information (product name, category, type, brand)	30,00%	20,69%
Product traceability (date, location, operators)	46,15%	46,67%
Product images	23,33%	18,18%
Production year (Season or/and year of sale)	38,89%	31%
Substance of concern name, location within the product, concentration at the level of the product, main components or spare parts (according to REACH Regulation)	45,45%	43,48%
Identification of product design elements that inhibit circularity (e.g. prints harder to recycle)	69,23%	78,57%
Sustainable design & services options (e.g. designed for repair, reuse, recycling ... R-Strategies)	50,00%	50,00%
Choice of materials and restrictions on substances (eg. Combination of fibers, flame retardants))	50,00%	50,00%
Product certification	41,18%	35,71%
Declaration of compliance e.g. with AFIRM, ZDHC MRSL	50,00%	50,00%
Identification of substances (name, location, concentration) according to other lists e.g. AFIRM, ZDHC MRSL	52,38%	50,00%
Material certification	34,62%	22,73%
Product care instructions	27,27%	19,05%
Color group, color description, color system information (Pantone, Coloro, etc.), numerical color value	31,82%	22,22%
Detailed chemical content	71,43%	80,00%
Fabric type	36,36%	23,53%

Short reminder

There are 3 'milestones' introduced ahead of the full operationalisation of the DPP:

CIRPASS

System
architecture

Information
architecture

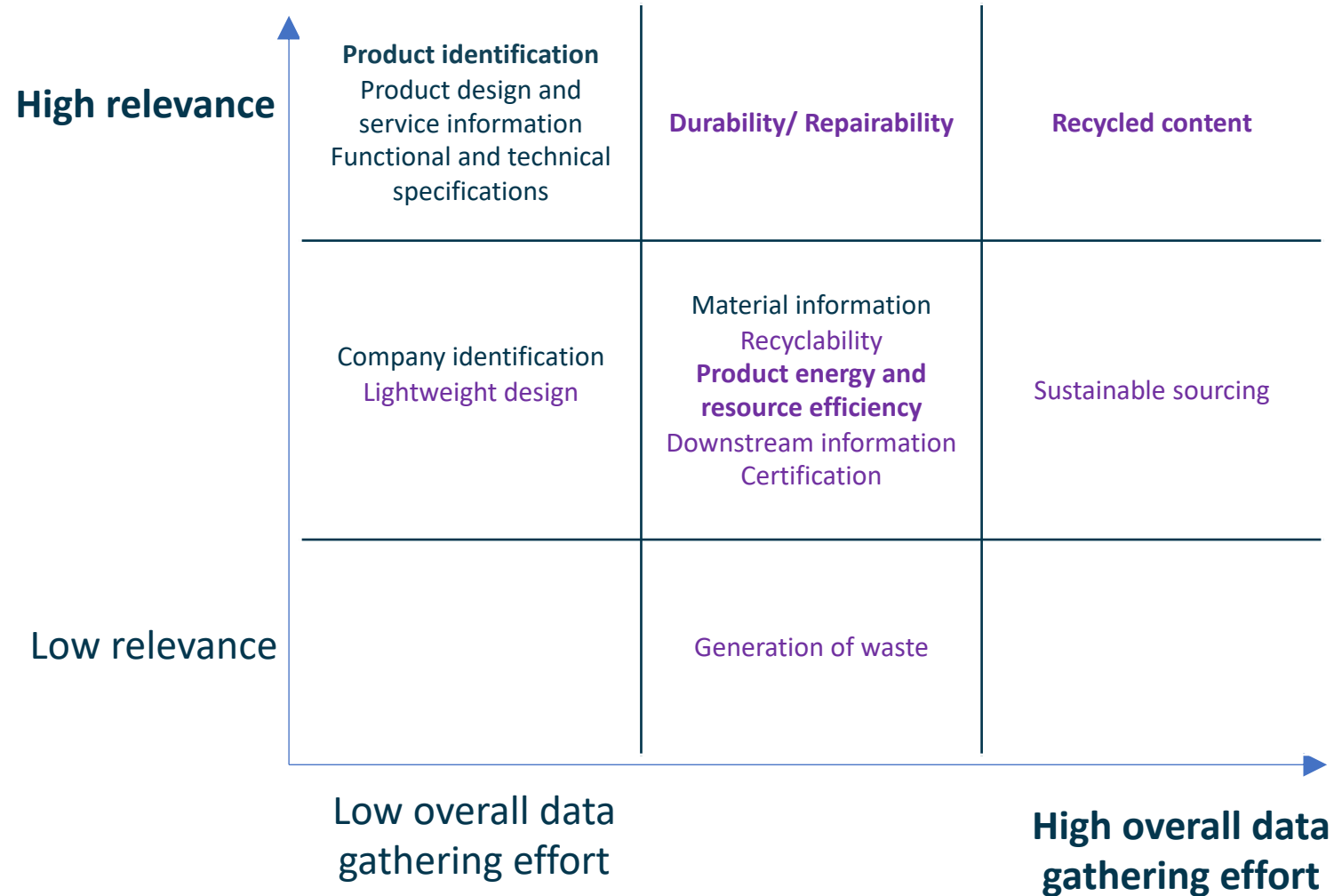
1. Regulation: Introduction of the DPP **concept**, description of the **scope**, identification of some **key features**.
2. Identification of **essential technical requirements** to be developed through standardisation process. A safety clause is introduced in case of delays or if the quality of the standards is not 'fit for purpose'. In such case the Commission shall adopt **common specifications** with the technical requirements needed.
3. Delegated acts: Identification of the **specific information** to be included in the DPP for each product or product group.

DPP mandatory for all products for which there is a delegated act



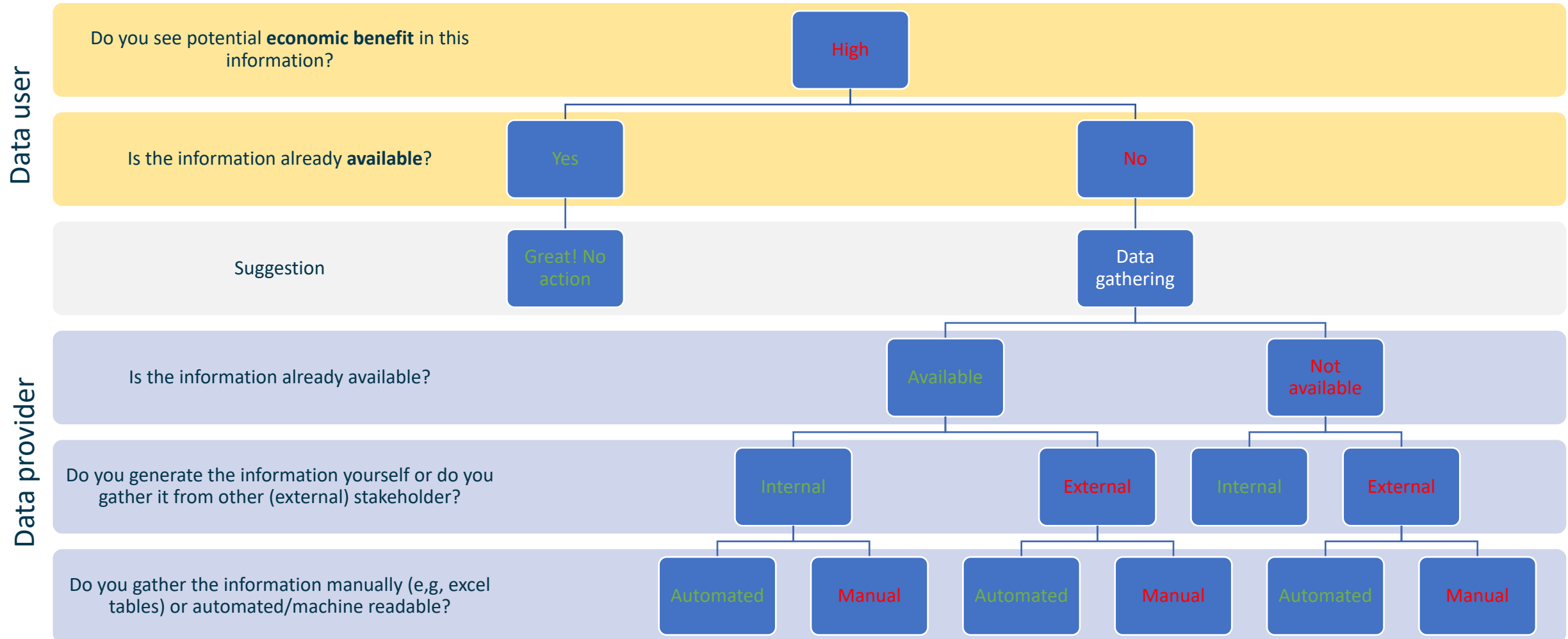
Relevance vs. overall data gathering effort

Electronic sector



Survey approach

Evaluation of relevant data and gathering effort



Survey approach: (3) which info

Information categories
Product identification
Company identification
Material information
Functional and technical specifications
Product design and service
Downstream information
Certification and label
* Product energy and resource efficiency
* Sustainable sourcing
* Lightweight design
* Recycled content
* Generation of waste materials
* Durability/Repairability
* Recyclability

JRC information categories

Tracability of the logistical path of the product (date, location, operator)
Recommended sales price of product
Date of product manufacturing
Country of product manufacturing
Retail information (product name, category, type, brand)

Information according to RoHS Directive 2011/65/EU; (Declaration of conformity (CE-Marking))
Information requirements according to REACH, Article 31 on hazardous, persistent, bioaccumulative and toxic substances
The name of the substances of concern present in the product (ESPR Article 7 (5))
The location of the substances of concern within the product (ESPR Article 7 (5))
The concentration, maximum concentration or concentration range of the substances of concern , at the level of the product, its main components, or spare parts (ESPR Article 7 (5))

Information according to ESPR Article 7 2 (b) (ii) for consumers and other end-users on how to install, use, maintain and repair the product
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Information according to ESPR Article 7 2 (b) (iii) for treatment facilities on disassembly, recycling, or disposal at end-of-life;

Material consumption associated to the production
Energy consumption associated to the production
GHG emissions associated to production
GHG emissions associated to the product

Evaluation of (potential) information in the DPP



