

THE TEN

The TEN cards result from extensive mapping of the sustainable design landscape by a team of design researchers. They have looked at both literature and practice to create a set of individual yet connected approaches. Each card identifies a significant, critical area for attention in the product lifecycle and suggests a strategy for analysis and change; approach and resolution; consideration and action; as a tool to overcome the barriers to improvement.

As a set of cards they offer a range of entry points for positive research-led engagement from the practical to the idealistic. Contemporary problems and key areas of concern can be analysed and defined through facilitated workshops, enabling participants to select their most relevant course of action. Whilst the cards have been developed with a focus on sustainability for designers of textiles and fashion, they have a potential role in strategic concepts for the design process generally.

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The cards promote group workshop discussions in game-play and role-play formats. They can help you examine, survey and highlight the intractable problem of sustainability and the role of design in change and innovation, through strategic thinking. We think of them sometimes as a map – other times as a template, whose meaning becomes clear when used to facilitate design workshops, with visual examples.

Three Ways to Play:

1 Landscaping & Check Listing

use the cards to explore the different problems that your company faces and see which actions you are already taking

2 Lead Cards & Coding

use the cards to understand your strengths, and where to focus your efforts as you move forward

3 Question Diagram

use this diagram to help you identify barriers to improvements and use the cards to facilitate solutions

Find all the tools you need in the resource area:

www.textiletoolbox.com

THE TEN

1

Design to Minimise Waste

V.3

1

Design to Minimise Waste

How to reduce the many kinds of waste created within the textiles industry, both pre and post consumer?

Assess the potential forward impact of design choices/decisions, on production, use and eventual disposal of textile products. Create a design narrative in response to a life-cycle analysis of the product.

Examples: slow design; design for long-life and short-life applications; zero waste cutting; design with enhanced aesthetic value.

THE TEN

2

Design for Cyclability

V.3

2

Design for Cyclability

How to upcycle existing garments and how to design with virgin materials, in anticipation of future recycling?

The initial design process anticipates the potential for eventual recycling and re-purposing of the textile product. Also existing garments or products considered as 'raw materials', ready for added value to be applied.

Examples: this strategy includes design for recycling, upcycling, design for mono materiality and design for disassembly for the closed-loop systems of the future. Think re-useable/non-invasive installation or renewal.

THE TEN

3

Design to Reduce Chemical Impacts

V.3

3

Design to Reduce Chemical Impacts

How can the use of harmful chemicals at every stage in the life of the product be reduced by design?

Select the most appropriate material and processes for any product to minimise environmental impacts.

Examples: seek organically produced materials; use mechanical technology to create non-chemical decorative Surface pattern; create effects to replace materials and Processes known to be harmful.

THE TEN

4

Design to Reduce Energy and Water Use

V.3

4

Design to Reduce Energy and Water Use

How to conserve water in the production and use of textile products?

Evaluate the ways water and energy are consumed in the processing of textiles. Assess the carbon footprint, particularly in consumer laundry.

Examples: In the production phase: exhaust printing and dyeing; dry patterning systems; air-dyeing; distributed manufacture. In the use phase: design for no/low laundry; 'short life' textiles; technical coatings to reduce washing; innovative and informative labeling; localisation; natural energy systems.

THE TEN

5

Design that Explores
Cleaner/Better
Technologies

5

Design that Explores Cleaner/Better Technologies

How can technology be used to make more sustainable textiles?

Design for new technologies to save energy and materials. Reduce environmental damage in the production of yarn and fibre, the construction of fabrics, dyeing and finishing of products.

Examples: bio-based materials and processes; 3-D printing; laser; water-jet; sonic cutting; sonic welding; digital printing, 're-surfacing' of polyester; novel dyeing techniques; digital finishing; tagging.

THE TEN

6

Design that Takes Models from Nature & Culture

V.3

6

Design that Takes Models from Nature & Culture

How can the practices of the past and models from the natural world inform textile design and production of the future?

Seek design inspiration, information and solutions from studying the textiles, habits and societies of the past and from nature including bio-mimicry.

Examples: shape-memory polymers to mimic natural movement; 'lotus effect' nano-coatings; Velcro; austerity repair; make-do-and-mend; D.I.Y./punk customization; modern nomads; historic dyeing/printing techniques.

THE TEN

7

Design for Ethical Production

V.3

7

Design for Ethical Production

How can design encourage ethical production, that supports and values people and skills?

Designers can engage with communities, either in the supply chain or for local needs.

Examples: sourcing fair trade materials; engaging suppliers who abide by codes of conduct; vertical supply chains; consideration of local resources; designers acting as facilitators of sustainable enterprise in communities.

THE TEN

8

Design to Reduce
the Need to Consume

V.3

8

Design to Reduce the Need to Consume

How can designers make stuff that lasts, that people want to keep and look after?

Textile products can be designed and produced to adapt and improve with age. Encourage replacement of shopping with creative social experiences; the customisation of clothing and textiles; the DIY culture.

Examples: emotionally durable design; slow design; consumer participation in co-design and collaborative consumption, crowd sourcing and social networks; apps for bespoke information.

THE TEN

9

Design to Dematerialise
and Develop
Systems & Services

V.3

9

Design to Dematerialise and Develop Systems & Services

How can designers develop the concept of designing services that replace or support products?

Employ a design strategy for multi-functional products and materials conservation via temporary and non-invasive installations. Encourage repair. Facilitate on-line/local communities of producer-consumers.

Examples: lease; share; repair; experience design; user-centered methods to design services; collaborative online/local communities; transition-towns.

THE
TEN

10

Design
Activism

V.3

10

Design Activism

How can designers extend their effect beyond the product to work creatively with consumers and society at large?

The textile designer becomes a 'social Innovator' using design skills to meet social needs. It includes designing events and communication strategies to increase consumer and designer knowledge about the environmental and social impacts of textile products.

Examples: publications; blogs; open-source networks; exhibitions; conferences; festivals; social media; manifestos.