

[PLAY - BED] by Lasa

Description

The new product is PLAY-BED and its packaging. PLAY-BED is an innovative bed sheet with an incorporated system to detect leakage of fluids to be used by children and warn the parents in real time. This product had been developed within a project funded by the Portuguese programme QREN, in partnership with Minho University. The company decided to apply 3 SInnDesign tools to evaluate the product from a sustainability point of view and identify gaps and improvement opportunities. Since the packaging had not been developed, some improvements were actually implemented to the previous packaging of LASA's products: reusable packaging, made of recycled materials. With this project, LASA aims at getting closer to young, technology driven and sophisticated clients by presenting them an innovative, yet well consolidated and daily product, with strong considerations in terms of functionality and sustainability.



Results

LASA applied the following SInnDesign tools to their new product PLAY-BED:

Design for sustainability brief

The target users are children aged 2-6 years old.

With this project, LASA aimed at getting new clients, exploiting new ideas, products and services and increase the knowledge sources for the identification of future R&D areas.

Since the product was already developed, this tool was important to systemize the information that the company had and allowed for an evaluation of the final results in view of the initial expectations of the company towards this project.

Motivating factors

This tool was important for the company to understand the importance of DfS.

LASA identified 11 important motivating factors for DfS, of which 3 are the most relevant:

Innovation: the strategic study prepared by LASA revealed there is a need, at international level, of new developments in the field of multifunctional bed linen.

New clients: Young, technology driven and sophisticated clients with sustainability concerns.

Competitors: With this project LASA has a clear competitive advantage. This product is completely new, there is nothing similar in the market.

DfS checklists

The checklists were applied to a traditional bed sheet (used as reference product) and to PLAY-BED, and a comparison was performed. It should be noted that the products are not entirely comparable, because PLAY-BED fulfils a need (monitoring fluids and warning system) that a traditional one does not.

More critical criteria ("C" in the tool):

- Resource cascading: this was not considered in the design.
- Encourage re-manufacturing: although the fibers can be recycled, at the end-of-life the product will be worn-out and therefore it cannot be re-manufactured.
- Reduce consumption of materials / consumables: PLAY-BED implies the use of additional materials in the fabric and in the monitoring system.
- Provide information for the adequate end of life process: no such information exists.

The most significant positive developments of PLAY-BED, in comparison to the reference sheet, were (selected "A" in the tool):

- Integration of functions: as explained above, this is a multi-functional product that fulfils very specific needs identified for children.
- Reducing air and water emissions as well as waste in the manufacturing phase: the production process has been improved due to design options. The threads are produced in high energy-efficiency machines, there is no dyeing and there has been a study with Minho University to determine the ideal amount of conducting wire to be used in each sheet.
- Design for consumer's health and safety: with this product, children enjoy a better period of sleep, with higher comfort and hygiene; for the parents, it is also beneficial as they are ensured that they will attend their children needs in time.
- Timeless design: for this product, LASA chose a very simple and timeless look, which avoids aesthetic obsolescence.

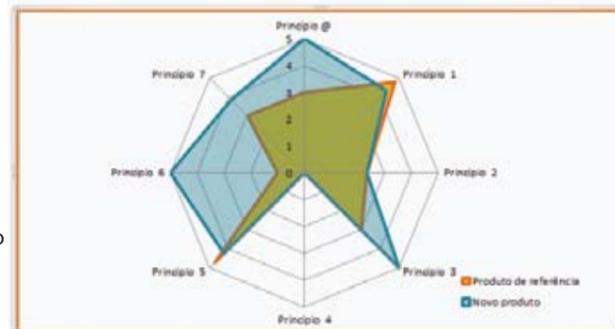
As for the packaging, since it had not been developed when the DfS Checklists were applied, a new one is being designed focusing on the following criteria: avoid or minimize packaging; reusable package system; information on packaging waste management.

Company information:

LASA was founded in 1971 by its CEO Armando da Silva Antunes.

Located in the north, in the textile industry centre between Guimarães - Vizela and Santo Tirso, the factory occupies a covered area of 22,000 m², employs about 400 workers and has one of the most advanced and modern machine parks worldwide. Its main products are home textiles: bed linen, towels, bathrobes or kitchen linen such as aprons, kitchen cloths, etc. Additionally, the company produces textiles for wall decoration, pillows and other decoration products.

<http://www.lasanet.pt>



Partner responsible for preparing this case study: LNEG, Portugal



The SInnDesign project is conducted by a consortium from Portugal, Spain, Austria and Denmark.

