

STUDIES ON STRATEGIC MARKETING AND ESTABLISHMENT OF TRUNK SPECIFICATIONS FOR DESIGNER CLOTHING AND SHOES WITH INTEGRATED SECURITY SYSTEM

MUNTEAN Vasile - Sebastian¹, URSU Elena Ruxandra¹, URSU Ioana Bianca¹, RADU Eduard¹, POPA Alexandru Nicolae¹ and Andrei DUMITRESCU²

¹Faculty: Industrial and Robotic Engineering, Specialty: Industrial Design and Innovative Products, Year of study: 1, e-mail: vasile.muntean@stud.fiir.upb.ro

² Faculty of Industrial Engineering and Robotics, Manufacturing Engineering Department, University POLITEHNICA of Bucharest

ABSTRACT: The main objective of this project is to research the new market requirements in order to create a trunk for designer clothes and shoes with integrated safety system. A market study will be carried out where the existing products on the market will be analysed and the potentials customers for the new product will be determined. The scientific importance of the topic is given by the three research directions of the realization and implementation of the new product: a) strategic product marketing – where the market study will be performed, the comparative analysis of the existing products and the determination of the target group; b) conceptual design – where the sketches of the new products and the detailed architecture will be made; c) detailed design – where the 3D model will be made, based on the ergonomics and anthropometry aspects.

KEY WORDS: designer trunk, market requirements, analysis, concepts, 3D design.

1. Introduction

This work aims to research the new market requirements in order to create a multifunctional trunk for designer clothes and shoes, where the needs of the target group will be analysed in detail. These analyses will help us to determine the new functions that the product must comply with so as to satisfy the needs of each customer. At the same time, the work aims to study the main methods of promoting the trunk for designer clothes and shoes as well as market strategies. The buyers of these products, such as the trunk, are the people with a considerable income, financially independent people, who have a vast potential to buy. Usually, these products are also targeted by people who promote elegance, luxury products.

Also, people who do not buy this type of product, may be those who still have the necessary money, but they prefer a lower product in terms of quality, just because it has a lower price. Given that they are most often used by people with a substantial income, we can say that people who choose this type of product, buy them not only for their usefulness, but also for their quality, design, colour, or prestige.

The materials used in the manufacture of these products are of high quality and have a high strength, as well as when it comes to being transported.

However, some common problems with this type of product already on the market are: poor safety methods, heavy weight due to the materials used which make it difficult to transport and low-quality materials.

So, the aim of this work is to create a practical, roomy product for all products needed by the user, light in weight, with an integrated safety system. The most important thing is that the product ensures the user the best quality, but also the safety of the stored products.

However, there are very few such products, as there are no small but spacious trunks that provide a minimum of security against product degradation or theft.

2. Strategic product marketing

2.1 Identifying market opportunities

Our product is a trunk for clothes and shoes for designers. It is used to facilitate the transport of expensive clothing items (from blouses, dresses, jackets) as well as shoes.

Due to the large storage capacity, the materials that will be used to make the product and the integrated safety system, it will stand out much more in addition to a suitcase or trolley. The trunk for designer clothes and shoes must stand out through elements that have not been used in the past or similar products from other companies, this will make it stand out forming an image on the market.

2.2 State of the art

There are trunk models for shoes or designer clothes, but none of them are a combination, to store both clothes and designer shoes. They also do not have an integrated safety system to provide optimal safety to the products, as they are only equipped with simple metal locks or leather buckles.

2.3 Selecting potential customers

Potential customers who might be interested in our product, more precisely the target group is largely represented by designers, fashion designers or artists, who use our product for events (shootings, fashion shows, tours, concerts, holidays) as well as for the actual display in certain clothing stores as a standard for clothing products.

2.4 Data collected from potential customers

We used the interview to identify customer requirements. The interview used in the collection of raw data aims to obtain concrete answers regarding the new requirements of the product concerned. Questions were asked for the areas: typical uses, pleasant aspects of current products, unpleasant aspects of current products and suggestions for improvement. This resulted in the following requirements:

- The product can be used to transport clothing items;
- The product can be used for storing clothing;
- The product ensures the safety of clothing products against degradation;
- The product provides a suitable storage space for all products;
- The product has a nice design;
- The product is ergonomic;
- The product is easy to maintain;
- The product is durable;
- The product allows sale in several compartments;
- The product is relatively easy to transport;
- The product has an efficient safety system;

2.5 Data on competing products

From the point of view of competing products, we will present the products of two famous fashion houses that offer for sale similar products:

- Gucci Guccissima Leather Handcrafted Shoe Trunk

We are talking about the Italian company GUCCI, which offers the product "Gucci Guccissima Leather Handcrafted Shoe Trunk", it is strictly intended for footwear. It is made of brown leather with the golden Gucci logo, with refined handles, metal corners and metal applications of the target type on the edges. This product is priced at \$ 49,300 and is pre-order only.



Fig. 1 Gucci Guccissima Leather Handcrafted Shoe Trunk [1]

- Louis Vuitton – sneaker trunk

The second competitive product is also a shoe trunk and is created by a French company under the name LOUIS VUITTON. For this company, it is a tradition to create "lifestyle trunks" for passionate collectors.

Specifications: Monogram Eclipse cloth, black cowhide handles, locking clasp, micro fiber lining, ruthenium brass metal parts, 2 mirrors, 7 drawers and double handle.



Fig. 2 Louis Vuitton – sneaker trunk [2]

3. Conceptual design

3.1 Internal research for new conceptual solutions

Following the market research and the existing models, a series of concept sketches were made for the trunk for designer clothes and shoes. Thus made the sketches I chose concept 2 due to the more organized arrangement.

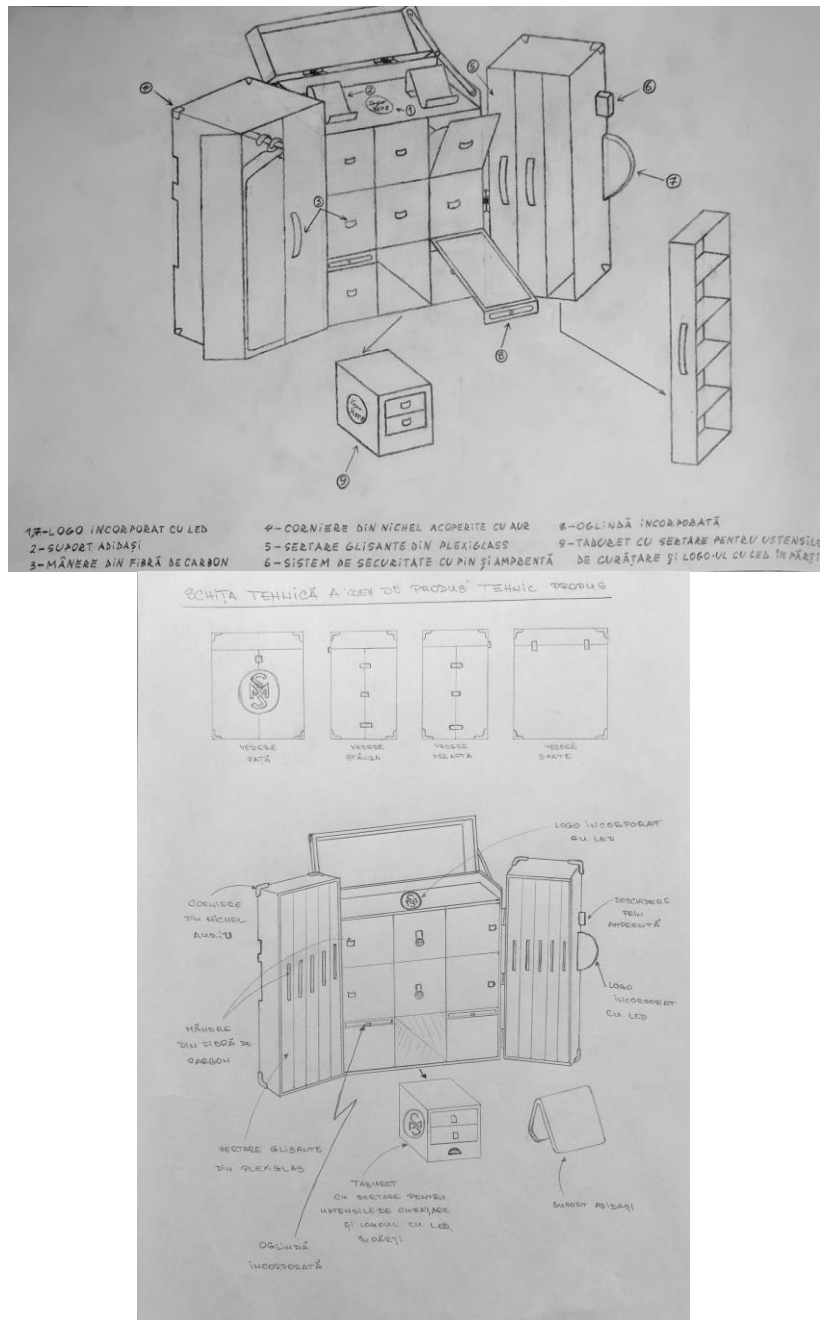


Fig. 3a Concept sketches 1 [3]

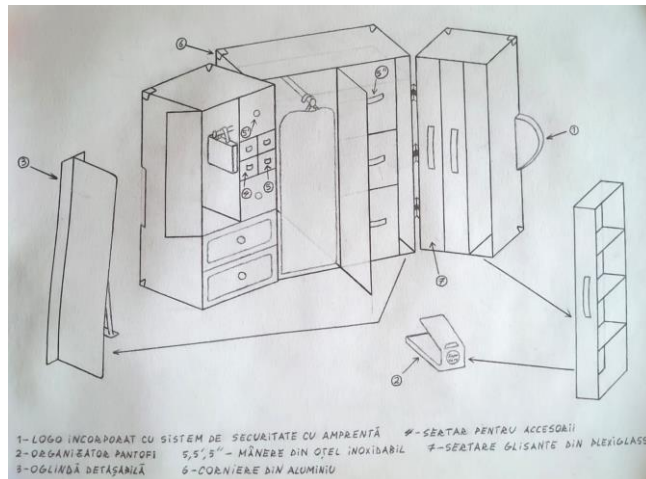


Fig. 3b Concept sketch 3 [3]

4. Detailed design

4.1 Proportion, shapes, sizes, and tolerances

- Proportions

The overall dimensions of the trunk are: 150x80 cm to facilitate its transport from one location to another.

- Shapes

The shapes used to make the trunk are quite common, namely: circles, rectangles but also arched shapes for certain elements.

- Tolerances

The tolerances shall be applied in particular to drawers so that they can be easily used, the tolerance being $\pm 0,3$ mm.

4.2 Determination of ergonomic and anthropometric conditions

- Ergonomics

Ergonomics has an important role in the design of the trunk for the user to benefit from optimal conditions of use.

The product has been designed to be ergonomic, a design made correctly due to the shapes used to prevent illness or injury from repeated use, which can later develop long-term suffering, illness, or disability. [1]

- Anthropometry

An extremely important aspect to consider is that not only the user will come in contact with the product but also the people involved in its realization. The dimensions of the final product must be in accordance with the anthropometry of the people who will use it. In order for the shoes to be easily identified, transparent drawers have been made for when the trunk is opened and they are visible through drawers, so that the user does not have to sit bent for a long time. [2]

In order to easily identify the clothes, the compartmentalized drawers were made on types of clothes with a horizontal opening.

4.3 Defining design elements

The main design elements used are the following:

- Brand logo placed on multiple parts of the product;
- Mirrors for viewing shoes during use inside the trunk;
- Display holders for the most expensive pair of shoes;
- Metal elements in the corners of the trunk to prevent hitting;
- The stool with mini drawers on which the user can sit but in which he can also store the products for cleaning clothes and shoes.

4.4 Establishment of materials and treatments

- Cedar wood

Cedar is more weather resistant than other common wood varieties, making it ideal for the skeleton of certain products. Cedar is also rot-resistant and, as it is naturally water-resistant, does not require any pre-use treatment and is easy to process. Cedar wood can be easily processed to obtain plywood. Cedar plywood will be used to make the trunk skeleton.



Fig. 4 Cedar plywood [4]

- Plexiglass

Plexiglass is a very commonly used material due to its advantages. PMMA plexiglass weighs half as much as glass and is much more transparent (it can be colourless-transparent, coloured, translucent, or opaque). The main features of plexiglass are: durability, reliability, affordability, diversity and quality. [3]

The side drawers for the individual pairs of shoes will be made of plexiglass.



Fig. 5 Plexiglass [5]

- Carbon fibber

What is commonly called carbon fibber is a material made up of very thin filaments of carbon atoms.

These are filaments in thin filaments which are then converted to carbon fibber in four stages:

1. stabilization (oxidation);
2. carbonization;
3. graphitization;
4. surface treatment; [4]

This material will be used to dress the trunk, to give it a modern accent.



Fig. 6 Carbon fibber [6]

- Velvet

Velvet is actually a combination of fabrics (usually 2 fabrics) and yarns, which are woven together in layers, one basic and the other on the surface, so that it is evenly distributed to give it a fine, soft feel at touch. This material can be made of silk, cotton, viscose, linen, mohair, or wool. This material will be used for subtle accents inside the trunk.



Fig. 7 Velvet [7]

4.5. 3D modelling, overall design, and execution

Due to the overall dimensions, the 3D model for the trunk of designer clothes and shoes was made to scale:



Fig. 8. 3D Models – renderings 1,2 [8]

5. Conclusions

Carrying out this scientific research work aims to create a product called trunk for designer clothes and shoes. This is an innovative and also very current product.

Our product comes with a lot of new elements, which offers more confidence and a much greater impact among designers, but also people with a considerable income. Many problems can arise when making this product, regardless of its nature and type. Problems can be of different types and can occur for a variety of reasons. Examples of this are: the material, the weight of the product which may make transport difficult, etc.

Therefore, for our product, the chosen material, carbon fiber, design, weight, and advanced safety methods are some of the aspects that potential customers could benefit from.

Also, as we know, this type of product already exists on the market, the one from the Italian company Gucci and the one from the French company, Louis Vuitton, which are competing products with our product, but there are some aspects that disadvantage them, such as size and lack of an integrated safety system.

The main objective of this project is to research the new requirements on the market, in order to create a trunk for designer clothes and shoes.

The aim was to analyse the requirements in detail and determine the factors that influenced the design of the new product. At present, much better-quality materials are used, which are getting better and better, the models are much more complex and sophisticated, and our product benefits from these aspects, and in addition to all this, a plus is that it brings the complete safety system, which has fingerprint and pin.

Even if this type of product already exists on the market, from several companies, it comes with a much more beneficial and up-to-date innovation, from which our customers can benefit. The aim of this project is to create a challenging and interesting product, and our product meets all the conditions.

The original contributions of the work are primarily the design, the materials used to make the product and the integrated safety system to protect the products against burglary.

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FIGURES

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