

A FEW CONSIDERATIONS ABOUT TRADE FAIR STANDS DESIGN

Abstract: *The paper presents some aspects related to the design of a trade fair stand, advertising a company specialized in the fabrication of corrugated fibre board packaging. The first section reviews shortly the main features of the industrial design. The second section deals with the structural conception of successful trade shows. Further, the importance of the package in the marketing matters is addressed. In this context corrugated fibreboard, as secondary or tertiary material is essential. In the final section, a comparison between two trade fair stands, representing a corrugated fibreboard company are presented.*

Keywords: *industrial design, trade fair, packaging, corrugated fibreboard.*

1. THE INDUSTRIAL DESIGN, A GLOBAL AND DIACHRONIC MODALITY OF EXPRESSION

The relationship between industrial design and research could be considered a bijection. The direct path of the bijection starts from fundamental research, ending in general with the development of several commercial systems. The reverse path, also important, starts with expertise and practice, leading to technologic developments and represents often a source of ideas for fundamental research.

The business dictionary defines the industrial design in a lapidary statement as “the creation and the development of concepts and specifications aimed at optimizing the functions, value and appearance of products, structures and systems” (<http://www.businessdictionary.com>).

Certainly, everyone is more or less aware about the idea of design, but the confusion still persists due to the diversity of its manifestation and its holistic vision. These make almost impossible a consensus on what design truly is. Beyond that, the design is a manner of global and diachronic expression, being one of the characteristics of the human activities that determines quality of life, affecting in each detail the everyday existence.

Basically, the industrial design may be defined as the human capacity of modeling the environment, giving a certain signification to the material civilization. In most cases, the design may be innovative and anticipative, determining somehow the trend of the civilization itself.

Human appetency for esthetics dates from ancient times. The first forms of bartering have been facilitated obviously by functionality, but by esthetics as well. Unfortunately, in many cases, the boundary between design and kitch or dilettantism is a very fragile one in the collective conscience, having clearly a social and a historical character and on the other hand depending on the cultural and material civilization of a certain community. At the same time, it is unanimous accepted that the industrial design in its modern acceptation, appeared in the industrial revolution era, being the tribute paid by the industry to the art. That was the very moment when the form began to follow the function.

The industrial design has also a semiological value, communicating esthetic emotions, functional valences, mark identity and after all, it may induce a compulsory behavior in virtual customers. That is why literature deals with the concept of “communicating design” [1], which embeds traditionally:

- trademark and design strategy
- visual identity
- package and its graphics
- product design
- commercial architecture (the design of the purchase environment)
- promotional design and web-design.

Design represents a very powerful and emotional language, but at the same time an effective manner in organizing and clarifying the messages delivered.

Besides the trademark, a designer communicates also the spirit of a company and its strategic intention.

It must be noticed that the design process accompanies all the function of a company: the production function, the commercial function, the research and development function and the marketing function.

Having as starting point the logic square of Boethius, one can see that the design, situated in the center of the consumption’s square, uses a different language, called sometimes “metalanguage” (Fig. 1).

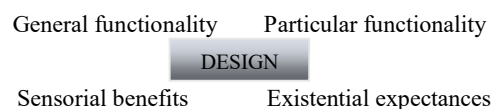


Fig. 1 The semiotic square of consumption.

Obviously, designing is the result of responsible thinking, being finally a mission that represents a sort of philosophy which influences decisions. In [2] is presented for the first time the idea of the responsibility of a designer in a perpetual dynamic world.

The development of the global scale market economy registered in the last years, led inevitably tot the sad reality of the sur-consumerism, meaning more packages and more products thrown at the garbage bin, more nomad products, more energy wasted...

The recent economic crisis showed how illusive the facile idea of the consumerism can be.

It was obviously one of the moments in which the sentiment of responsibility grew up in the collective conscious. This sentiment determined the repositioning of the design, which was reduced to its strict functionality.

Being more and more faced with the spectrum of natural resources depletion, the reconciliation of the designers with the eco-design is more and more visible. This somehow shows the diachronic dimension of the design which must readapt and reinvent itself, according to the socio-economic-cultural conditions.

2. TRADE SHOWS CONCEPTION

Trade shows date back to biblical times. An international trade show that took place in Damascus, Syria is cited in the Old Testament (Ezekiel, 27: 12–24). The development towards contemporary trade shows format began in Germany in the 1850s and the first significant international trade show was organized in Crystal Palace, in 1851, drawing exhibitors from 72 countries. In the US, trade events can trace their roots to the completion of the Chicago International Exposition Building in 1872. These and other early trade shows served a useful purpose by stimulating commerce and creating market access to local products [3].

The words of Shakespeare, “all the world’s a stage” is nowadays more present than ever, while our daily activities are culturally inflected and consciously performed. In this respect, trade shows are a place of performance where the various actors (buyers, sellers, politicians, cities, brands, countries, spectators or passers-by) respond to the stimulus of the trade show, not just in a commercial sense, but by performing themselves, and by responding to the way that others act [4].

Trade exhibitions are used as tools by which companies market their goods and/or services to visitors and buyers, being recently one of the best marketing tools. In [5], is defined the 4Ps conceptual framework for marketing decision-making, which used product, price, place (or distribution) and promotion in the marketing mix. Trade exhibition falls under ‘promotion’ activities.

Since trade shows combine elements of personal selling (e.g., sales people staffing booth stands), advertising (e.g., product display, brochures), and live communication (e.g., product experience, entertainment), they help exhibitors pursue multiple marketing objectives simultaneously, such as creating product awareness, establishing customer relationships and influencing purchase decisions.

The trade show concept has evolved in time in order to adapt itself to the business and economic needs of the moment, becoming nowadays an important communication tool capable of developing the relationships with the actual and most important with the virtual customers. It is therefore a dynamic tool that can vary depending on socioeconomic needs [6].

Trade shows constitute a highly-concentrated market system, where a large assortment of sellers, buyers, suppliers, distributors and intermediaries are gathered in

one place, for a specific period of time, creating a fertile ground for rich, face-to-face interactions. The objective of exhibitors is to obtain opportunities to analyze and access target markets, to effectively promote sales, to find new buyers, and to exploit overseas markets. On the other hand, visitors have opportunities to obtain the latest information, to address manufacturing problems, to compare their products with those of competitive manufacturers, and to enjoy the general excitement of visiting trade exhibitions [7].

Trade shows are often classified into the following typologies [3]:

- depending on their industry profile, the trade shows may be vertical or horizontal (whereas vertical shows typically exhibit a narrow product range, horizontal shows exhibit a wider product range, often derived from multiple industrial sectors);
- depending on the visitors’ profile, the trade shows may be industrial versus consumer (Whereas industrial shows primarily target professionals and organizational buyers, consumer shows primarily target individual consumers and the public at large; there are also mixed shows that cater to both professional and consumer visitors, often by devising separate attendance schedules);
- depending on the geographic origin of their participants, or market coverage, trade shows are classified into international, national and regional.

It must be said, that regardless topology, a successful trade show must follow a succession of steps [8]:

1. *Clear definition of the aims of exhibiting*

Setting clear specific aims is the first step in achieving them, this step being crucially important.

2. *Accurate budget planning*

The realistic calculation of a budget creates a solid financial basis for a company’s participation in a fair.

3. *Exhibition stand concept*

An impressive stand attracts visitors. The issue here is a coherent stand concept that is derived from the goals.

4. *Visitor marketing*

Of all the ways of addressing visitors an invitation to a fair is the most effective, because invitations differentiate yourself from the competition and generate interest.

5. *Focus on new contacts*

In this respect, an exhibitor has to inform potential visitors about the participation in a fair.

6. *Staff briefing*

A success factor is how a discussion with a customer on the stand progresses.

7. *Trade fair discussions*

Trade fairs are forums for communication, and this is why the focal point on the stand is the successful dialogue with customers.

8. *Record of contacts/lead management*

Companies should decide on standardized forms for creating a record of discussions.

9. *Follow-up evaluation of a trade fair*

All the business potential generated at a fair is concentrated in the discussion protocols that were produced during the fair.

10. *Monitoring success*

The success of a presence at a fair should not left to chance but analyzed with great precision.

As a partial conclusion, a stand can be more than just a place where your people meet show visitors. It can communicate using signage and enhance visitor engagement by being properly laid out. But the stand can do more than this – it can attract visitors, highlight products or services benefits.

3. PACKAGING

Packaging played a crucial role in history in the balance of power. The era of the great explorers created a supplementary request of goods (spices, silk, tea, coffee, chocolate, etc.) along with the necessity of shipping them on long distance. The ability of shipping goods around the world determined finally the economic growth and the flourishing of the society.

At the beginning, the essential and at the same time the unique role of the package was that of usefulness. Nowadays, in order to be relevant, a package must suggest more: content, functionality and a category of virtual customers for the product inside. The package mustn't communicate directly, neither in a strident nor in a barren manner, the design idea has to bring off a connection of the product with the buyer both at rational and emotional levels.

The buyer's behavior isn't always dictated by the simple logic itself, the purchasing act being not always eminently a rational one. The consumer behavior is volatile, complex and even paradoxical. Note that the first contact of a buyer with a product is made often at the package level. Therefore, the semiotics of a package must be a pragmatic one, aiming to grow in the buyer the desire to buy a certain product, due to its features:

- form and dimension
- the chromatic game
- the illustrations
- the text blocks

Most products are packed in more packages, each of them communicating in a different manner:

- The primary package, is in direct contact with the product;
- The secondary package, has two functions: the first is the function of a collective package and the second, the function of valorization the primary package;
- The tertiary or the logistic package, groups the secondary packages in order to be palletized, stored or shipped; the logistic package must fulfill certain stiffness and resilience requirements, but at the same time it has to have an attractive graphic since it is often visible by the consumers in the large surfaces of hypermarkets.

Beyond the protection and the conservation functions of a product, the secondary and tertiary package have the primordial role of communicating a product or a trademark, being an essential component of the communication mix, together with the promotion at the point of purchase (mainly displays), through mass media

and online. Without package, a product looks neutral, lacking attractiveness in the eyes of the buyers.

Lately, one can speak about a "commercial anthropology" [9], the modern buyer being more and more competent and on the other hand submitted to the anxiety induced by the mass media. That is why, a nowadays package must be both esthetic and practical and finally ecologic and recyclable. It should not contain untrue elements, but to perform correct information, being also esthetic by its simplicity.

Communication in design is dynamic, that is why the packages, as a component of the "communicating design" must comply to this process. A package that today represents an efficient manner of communication, could be revoluted tomorrow. Therefore, a new designed package has not necessarily the same life cycle as the product itself. That occurs often, when an aggressive competitor wants to catch the market with a similar product, having a different material for the package (more reliable, ecologic, recyclable, biodegradable, etc.).

In nowadays global economic context, the companies are also stuck between the globalism and the local specificities. That is why, companies must follow the principle enunciated by Patrick Geddes ("Think globally, act locally"), which has also a strong ecologic impact, with a high tendency for reusable, ecologic, recyclable, biodegradable, packaging materials.

It must be said also that the urbanization and the industrialization of the twentieth century determined a dramatic change in the purchase philosophy itself. The development of the self-service stores has transformed the buyers in actors, the role of the clerks being reduced to minimum. This veritable revolution has permitted to the different brands to compete against each other, the package itself being the real silent seller. Thus, the role of the package has evolved in a vital marketing tool, contributing to the development of a specific packaging industry.

Speaking about design, part of subjects refers to fashion, another part to habitat interiors or even to their architecture and another one to the esthetics of the products in general. Unfortunately, few of them have in mind the packaging design, though this late one has an overwhelming contribution in the sale of any product, representing an essential component of the marketing mix.

Packaging requires expertise in several areas: marketing, strategic planning, research, psychology, art, industrial design, graphic design, logistics, technology, production, distribution and sales, etc.

A package designer's work doesn't confine to esthetics, but also to the intuitive understanding of what motivates the customers in buying or ignoring a certain product. Thus, for a package designer, it is critical to understand the rational and emotional reasons that affect the success of a product on the market.

The evaluation of a package is submitted to some technic-functional criteria:

- respect versus the environment
- health maintenance
- planet conservation
- products' protection and conservation

- correct information
- expressive and high quality graphics.

The request of the market is often generated by the package itself. The customers' memory is generally a short term one. On the other hand, customers' mood is changeable and they become sooner or later bored of a product. This is the reason for, trademarks must evolve and reinvent themselves constantly. The permanent changing process should be engraved in the DNA of the companies, since nowadays all products and packages are evaluated by the customers in a critical manner.

Packaging design is an exciting area, being in continuous evolution. More than an instrument meant to enclose and protect products, in order to be stored, distributed or sold, packages should try increasingly more to convince virtual buyers to effectively buy a certain product.

The packaging role grows continuously, due also to the development of new materials, new fabrication technologies and new exciting graphics.

4. CORRUGATED CARDBOARD, AN ECOLOGIC MATERIAL

Each stage of a design process imposes decisions related to the materials and technologies. The variety of the available materials is huge. An engineer may choose from over than a hundred thousand materials and even though standardization tries to reduce their number, the continuous occurrence of materials having new properties extend permanently the available option.

The designer's subtlety is manifested in the selection of materials, determined by his experience and affinity to certain materials. For a designer, materials are like words for a poet. When a poet explores new and hidden meanings of the words, the interest for his poetic art grows [10]. The same occurs in plastic art, architecture and design too, materials being inspirational elements for these areas. A deep understanding and an attachment for materials may stimulate new features, new ideas, sometimes spectacular or even revolutionary.

It is important to note that every human activity has a certain environmental impact. The activity of the last decades overcomes somehow the absorption capacity of the environment related to the consumption of materials and energy. Thus, syntagmas as "design for environment", or "eco-design" and "design for sustainability" are more often present, conferring to the design a moral valence.

In the strategic choice of materials, a designer must take into account the commitments of the present time, orienting himself mostly to reusable, recyclable, biodegradable materials, having also a low degree of toxicity. Needless to say that in this context, somehow dramatic for the environment, paper and implicitly cardboard, as ecologic materials represents valuable candidates for the packaging industry.

From the prospective of the design, recycled paper has nowadays similar or even better qualities than paper produced of raw materials, i.e. plants fibers, or other fibrous materials. In this respect paper and cardboard are ecologic reusable and recyclable materials, bringing considerable benefits to the environment conservation.

The corrugation idea of the paper for growing its stiffness was patented at the middle of the nineteenth century. The coming years, saw a flurry of development in the corrugated industry, the introduction of liners, double-wall (a sandwich structure, having two faces named liners and a fluted corrugated sheet), triple-wall corrugated board and preprinted liners for corrugated.

The combination between the liners and the corrugated medium generates several cardboard variants. High liners volume mass density determines a better burst and stackability. On the other hand, a proper volume mass density of the flutes confers a higher mechanical strength as well. The flutes represent the essential component characterizing the mechanic and economic performances.

The fully automatic die cutter entered the scene in the middle of the twentieth century. Flexographic printing inks then added a new dimension to the corrugated industry: printer-slotter operations were added to the folder gluer to produce a single printer-slotter-folder-gluer, the road to high graphics on corrugated has been strewn with innovative machinery introduction.

The largest explosion of change ever experienced by members of the corrugated industry has occurred in only the past three decades. In the large super stores which can be seen in the landscapes of many cities, in metropolitan and suburban areas, the way in which goods were being sold to the consuming public had changed, the multitude of clerks, who assisted buyers with their purchases, explaining all the products to them, providing them with important information, were replaced by the advantages of the packaging industry. This is an inherent consequence of the 21st. century demands for global supply chain.

Dramatic shifts in the retail environment in the markets around the world have led to the need that corrugated packaging function and communicate in ways never before imaginable. These developments have also caused the irrevocable blending of the historically segregated corrugated and folding markets into one inclusive packaging industry.

As another partial conclusion, it can be stated that corrugated cardboard represents the most usual material used in secondary and tertiary packaging.

Depending on the approximate number of flutes per linear meter and their height, there are several types of standardized flutes, i.e. A, C, B, E types (the most common) and F, G and N.

Table 1 presents the main features of the different types of corrugated fiberboards.

Table 1

Types of corrugated flute		
Type of corrugated flute	Approximate number of flutes per linear meter	Approximate height of the flute (mm)
A	105-125	4.5-4.7
C	120-145	3.5-3.7
B	150-185	2.1-2.9
E	290-320	1.1-1.2
F	400-440	0.7-0.8
G	550-570	0.5-0.55
N	660-680	0.46

The double or even triple layer structures represent combinations of different types of flutes, e.g. EB or CB.

5. EXHIBITION STAND - CASE STUDY

Creating an eye-catching factor for an exhibition stand is vital. Even though a company has superior products or services, along with a well-trained booth team, poor visual appeal can steer potential customers away.

As it was stated in the previous section, one must keep in mind the exhibition goals throughout the design process. On the other hand, the designer must think of the stand as a story. What's the dominant feature, key message and take-away memory?

The layout of the stand on the floor and walls not only affects the look of the stand, it also changes the way visitors perceive it and therefore react to it. The exhibit stand should take full advantage of the booth space. It must be used creatively to show off the brand's personality and create something truly unique.

An open design shows an easily accessible stand, welcoming to potential clients and creates easy visitor flow. If this is the aim, at least 70% of the stand frontage must be open. Conversely, a closed stand shows that the exhibitor is aiming to receive a more selective category of visitors, the stand being somehow meant for professionals.

The wording should be as succinct as possible. The message must be short, clear and easy to understand, of 6–10 words, maximum. There is no need to use full sentences. The use of action verbs can be particularly effective. The text must be placed on the top half of the stand in order to be not blocked by people in the display area.

Good graphics can really make a really stunning impression. The stand should clearly communicate the core message. The old adage that "a picture is worth a thousand words" is highly relevant. Using the right images can help convey complex ideas quickly and effectively without the need for reams of text.

Images that are life-sized can be especially powerful.

The company logo should be always used, to confirm the company identity.

It is important that the size and the placement of the images can be seen well from a distance and are not obscured.

Adding lighting is not a luxury. Rather, it is an effective method to increase traffic and ensure for a clearly expressed message. On a basic level, lighting allows visitors to clearly read text and view displays, but on a deeper level, it can convey a certain atmosphere and image. Lighting can also be used to highlight a particular area of the stand, to bring attention to a certain product or service or to entice attendees into the stand. Choosing the right materials will help to reinforce the company image and create the kind of dazzling design that will attract the target market.

Two exhibition stands will be presented: the first being a pile of packages and the second pursuing a concept.

Figs. 2 and 3 represent the two trades show stands built out the same company, specialized in packaging, at a difference of a few years.

The first one (Fig. 2) is advertising packages in a wine trade show, having a poor concept, which does not take into account the compulsory succession of steps that must be covered in building a successful exhibition stand. It can be easily seen that it pursues no concept, being nothing more than a pile of boxes, used mainly as collective and secondary packages of wine bottles. There is no area for discussion with the virtual customers, there is no dynamic presentation of the company on a video monitor, giving the impression of an overcrowded interior, almost like a hoarder's house.

Unlike the first one, the second one (Fig. 3), a stand from an exhibition dedicated to packaging industry, named "Packexpo 2016", is totally different.

"Thinking outside the box" represents the watchword of the company trying to highlight the great importance of the packaging in nowadays marketing matter, meaning that one should think beyond the exteriority of a package, but to the esthetics, the functionality, the resilience and the communicating capacity of a package. The truth is that in a world of consumerism, where everything is reduced to marketing, perception may easily replace reality and the rhetoric exclamation of Steven DuPuis "Which came first the product or the package?" is more actual than ever [11].

The exhibition space is well-balanced, pursuing a clear concept. The stand communicates the logo and the watchword of the company. Supplementary, it provides a dynamic presentation of the company on the video monitor. The two large panels suggest that customers are struggling for the products packed in the company packages. The panel on the left side suggests four pairs of hands hastening to grab a company package. On the other hand, the panel on the right suggests a customer running while dragging after him a company package. Both panels want to communicate that the company is a leader in the packaging industry and its packages really contribute in better selling the products.

The visitors' area is not neglected as well. The novelty here is that the furniture of this area is built out of the packaging material of the company, i.e. the corrugated fiberboard. The table, the sofa and the armchairs are designed as advertising products for the company innovating capability, being built of corrugated fiberboard, a light, cheap, reusable and recycling material.

The corrugated fiberboard furniture was designed using a specific packaging industry software. It's about Impact CAD, created by the company Arden Software, a very versatile for the design of paper-based packaging, point of sale displays and production tooling. Fig. 4 presents the project of the corrugated board armchair of the trade fair stand from Fig. 3, designed in Impact CAD.



Fig. 2 First trade fair stand.



Fig. 3 Second trade fair stand.

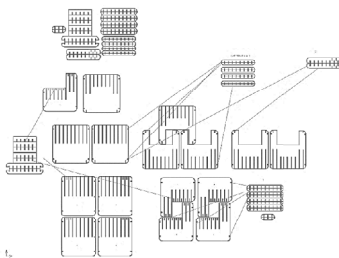


Fig. 4 Armchair project designed in Impact CAD.

Impact CAD features a set of fully interactive drawing tools as well as a wide range of reusable design components, which make the creation of custom drawings much faster. It is capable of calculating one, or multiple, interlocking nesting patterns simultaneously, to ensure maximum on-press efficiency and minimum material waste.

Impact's world renowned die making features of the manufacturing process. Customisable tool settings enable customer specifications to be stored and re-used for maximum productivity and guaranteed quality control. Impact includes an extensive range of pre-defined machine settings from all of the industry's leading press manufacturers (<http://www.ardensoftware.com/impact/>).

6. CONCLUSIONS

From the considerations above, transpires the crucial importance of the fair trades in the marketing policy of the companies. On the other hand, the authors are advocating ecologic materials for exhibition stands. In this respect, corrugated fibreboard could be an excellent choice due to its qualities.

In the final section, a comparison between two exhibition stands is performed. The stand depicted in Fig. 2 doesn't obey to any design concept, while the stand depicted in Fig. 3, totally designed, produced and installed in situ by the authors of the present paper, pleads for a coherent design concept. Moreover, it has been built almost entirely of ecologic, recyclable and reusable material, i.e. corrugated fibreboard.

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Authors:

PhD. Eng. Nadina NEIDONI, R&D Manager, Rondocarton Romania, E-mail: nadina.neidoni@rondoganahl.com, Phone: +402723299009

PhD. Eng. Mircea BUZDUGAN, Technical University of Cluj-Napoca, E-mail: mircea.buzdugan@insta.utcluj.ro, Phone: +40264202502.