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Designing Aspects with Software in Packaging Industry

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Abstract

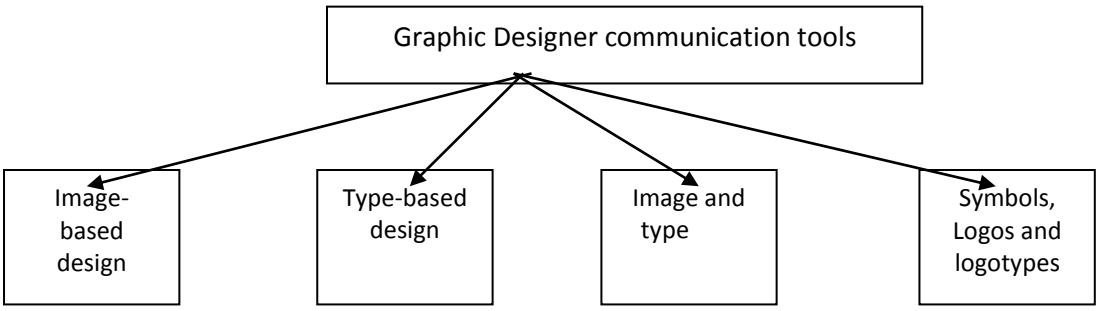
Packaging design plays many functional roles not only the basic shapes of package to keep in mind the shape of the product but also to reach at the final stage that also make it to attract the consumer eyes to buy the product. Most products are meaningless (or at least undifferentiated) without their packaging – just takes a look at any tooth-paste or tea package and think about how you would chose one from another. The purpose of this paper is to provide a theoretical framework with which to examine to which how packaging design software contributes to sale usually and product lifecycle management (PLM) in particular. This paper develops a different thought that can be used to elaborate the needs of all parties that are relevant to the designing of a package. This framework aims to provide new insight into the creativity of new package design via designing software in a logical way rather than used in ancient time in the packaging industries.

Keywords: Package Design, Design Process, Packaging design and development, PLM Artwork

1. INTRODUCTION

In the 80s and 90s it could be argued that packaging designers concerned themselves mostly with their craft could help add value in terms of improving aesthetic appeal, to then improve sales. Past research in designing and development has largely succeeded to increase the marketing and business. Graphic design is a part of our daily life.

Graphic designers combine art and technology to give shape of package and to communicate ideas.



Graphic designers make package design by considering the shape, size and volume of the product and very important thing the state of the product either it is solid, liquid and gas. Graphic designers make logos of the company for security and counterfeit and labels to elaborate the information of the product how to use it and how to transport it.

2. PACKAGE DESIGN

In general:

1. Planning and fashioning the complete form and structure of a product's package. In creating a new design or revamping an existing design, the following aspects of a product's package are usually reviewed: size and shape, color, closure, outside appearance, protection and economy, convenience, labeling, and the packaging material's effects on the environment. The best packaging system is then developed by careful evaluation of product, market competition, and existing product line. Generally speaking, package redesigning is done one element at a time, to preserve the brand loyalty of existing customers.
2. Marketing support specialty embracing the planning, creation, and production of the entire physical presentation of a product's package. Trained designers specialize in this field, which encompasses the art and science of creating optimal product packages.

2.1. Design Process:

In the design solving process, the AIDA formula (Attention, Interest, Desire and action) is used in most of the cases. But in case of package design, the 4c formula is most suitable. The 4Cs are: Concept, Complexity, Compromise and Choice.

Concept:

Peoples buy product not only what they can do but also for what they mean. Concepts must provide the elusive psychological bridge between the people and product, as they would like it to be. They, thus help in development tangible characteristics with the help of various graphics elements like shape, form, type and color. The concepts includes functional aspects of packaging such as holding the product in package, closing and opening device, and the way to stack and handle. Concepts also bring intangible value to the package.

Complexity

Design concepts, materials and the package manufacturing process may be conflicting with the requirements. A package may be perfectly satisfactory for all purpose, but it may add to the cost of the product so much that the customer is now deterred. A product with an excellent container and an eye catching surface design will not succeed, if ease of use is not considered. Sometimes the materials selected are perfect for the design but may not be durable enough to protect the product or make it stand up to handle.

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Choices

Design requires making choices between many possible solutions to a problem at all levels from basic concepts to the smallest details of design element-shape, form, color and typography. The choice of the design is dictated by the materials on which it is printed and whether they are economical and commercially viable.

But now in the age of globalization, customer satisfaction is a very important task particularly when we are designing a package.

So, now a day this formula is used in industry in this way- AIDAS. According to new technology but in case of Package design, the 5c formula is most suitable. The 5Cs are: Concept, Complexity, Compromise, Choice and Change.

2.2. Package Designing and development

In the early days, when the package or container had a limited purpose to perform, its design was entrusted to a printer or was done by the manufacturer himself, or even the works manager, engineer, technician or the salesman. Today, it is the job of a specialist, the package designer. However, it is slowly being realized that a purely intellectual designer alone cannot fulfill the task of designing a package that can successfully compete in a supermarket and advances it sales.

Today's package design needs a great deal of thought and first class graphic execution, if it is to advertise itself and compel the attention of the consumer. It should not be agreeable only to the artistically sensitive, but must please every possible consumer. Unlike a short-lived advertisement or a poster, the package is designed to last as long as possible.

Product Lifecycle Management and Product Visualization

In an increasingly global economy, consumer packaged goods (CPG) companies are charged with enabling effective global collaboration across functional groups that can include design, brand development, marketing and product engineering.

To address this challenge, many CPG companies are leveraging product lifecycle management (PLM) solutions- technology designed specifically to manage the entire process of developing a product from concept through design and manufacturing to service and disposal.

By taking advantage of the collaboration inherent in PLM solutions, packaging companies can work seamlessly to bring products to market faster and more reliably. They also can avoid unnecessary reworks, cost overruns and product launch delays. In a world of shrinking margins and increased competition, greater efficiency can become a key differentiator.

Within the organizations and throughout the value chain, PLM solutions can help to advance the pursuit of innovations by delivering solutions that integrate business process management with cutting-edge tools for design, engineering, and production planning. This article explains five keys ways a comprehensive and integrated PLM solution can help improve the package design process.

By leveraging PLM technology that enables lifelike, online 3D experiences, package designers can conceptualize and experience a product and its package virtually. This accelerate the product development cycle and decision-making processes by putting interactive 3D models at the designer's fingertips, enabling the easy and rapid creation and design of new products and related materials.

Beginning with concept development, improving 3D models and enables designers to create a new pack combined with artwork, 3D models and stickers; visualize and

compare packs; export storyboards with high-res images; and change the visual properties of materials. They can also make virtual prototypes seamlessly accessible across the enterprise network and decision chain while significantly reducing all validation steps.

2.3. PLM in artwork generation

To decrease time in the artwork process, companies can automatic artwork generation with PLM technology. By integrating the information system into the artwork process, organization can globally centralize, control, and streamline the filtering and consolidation of artwork data briefs.

With conventional processes, creating and developing artwork and packaging for any new product typically takes a minimum of several days. Brand guidelines and correct use of relevant and current information on the package are left to individuals in the design chain. These results in incorrect branding increased print costs, and errors on the labeling and artwork.

With automated artwork, finished copy can be drafted in minutes. Direct, data-driven, automated artwork production removes the human phase and, with it, the majority of inaccuracies that can lead to problems once the product hits the shelves.

Automated artwork is always repeatable, always uses the latest versions of the truth, and removes all opportunities for human error at the artwork production stage.

The removal of human error from content creation not only improves accuracy but also reduces risk of product recalls and closes the compliance loop in sectors where traceability and audit are important.

Automation also enables designers to drive more value from existing systems, with minimal deployment issues. Designers gain maximum control over data preparation and consolidation, delivering improved accuracy and reduced costs for rework. The reduction of cycle time in artwork production accelerates time-to-market and the costs of third-party suppliers.

After the artwork for a package is completed, package designers move on to the labels. Each label needs to comply with appropriate regulatory requirements, depending on the type of the product. With the regulations in mind, designers need to obtain marketing text and lay it out for the most effective packaging. Taking language translations and others factor into account, the process can be quite complex.

Designers can manage marketing briefs, create labeling text objects for product briefs, manage lifecycle and approvals for text; in all, they can manage the entire approval process including artwork.

PLM enables designers to maintain continuity in labeling and complete the appropriate approval cycles before printing the labels or marking them as finished.

Once a packaging bill is created, designers can then look at green initiatives, an increasingly important issue for product manufacturers.

Global spec management enables designers to track packaging weight for each component in the product. This helps them to comply with the requirements of regional government around the world to minimize consumer waste.

With all of the product and packaging data together in one place, this tool also helps designers easily gather information about the packaging specs for quick reporting.

PLM solutions also enable authoring integration- the integration between a company's data center and the authoring tools designer's use, such as CAD and Adobe Illustrator, to create and edit content.

Through this process, companies can increase the efficiency of design, technical and development teams by establishing easy collaboration among them. Designers can securely distribute and collaborate on content within libraries or related to specific products. In the development of a particular product's package, designers can access the PLM system directly through the native desktop application for easier, more seamless workflow.

In an increasingly competitive global market, companies need to continue to innovate in order to remain competitive and pull ahead of the pack. By reducing costs, increasingly productivity and beating the competition to market, PLM solutions can help to market this reality.

3. CONCLUSION

By this study it has been found that the application of Packaging Software have ultimate impact on Packaging Designing, now a days because applications of software in this field reducing time of Packaging Designing as well as increasing the accuracy up to highest level apart from these software can be also capable to perform the virtual performances tests to ensure efficiency of the package in form of designing selection of color from the color palette measurement, appropriate size, appearance esthetics and feel up to some extent. It depicts that the application use of Software in package design appropriate and become necessary day to day.

Change is the law of nature. As we are today, we were not in past and as we are today, we will not be in future. Changes are adopted by the companies.

However it is slowly being realized that a purely intellectual designer alone cannot fulfill the task of designing package that can successfully complete in a supermarket and advance its sales. With the help of Software package have first class graphic

execution, advertise itself appearance is extremely good. We can create new innovative design with the help of software.

In future, we are hoping that latest and advance software should be come in the market for appearance, size, color and dimension, voice input software creating the design.

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