

## *Chapter Six:*

### **RETHINKING INDUSTRIAL PACKAGING: AN EXPLORATION OF SUSTAINABLE AND FUNCTIONAL DESIGN SOLUTIONS FOR PRODA AND INNOSON IN ENUGU STATE**

*Contributed By*

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#### **INTRODUCTION**

**E**xploration of appropriate product package design for industries in Enugu State will help to improve packaging in industries where Package design is a branch of the art of creating the container, graphics and visible outer presence of a product that a consumer buys at retail or other means, like in the market, or receives in the mail. It can be created through a concept originated from the designer or through modernising the existing one through the use of sketching, photography, video and modelling the prototype of the design, either in 2D or 3D. An appropriate product package design for industrial products is aimed at creating an attention-arresting and quality packaging that will induce the consumer to buy the product without much explanation or convincing persuasion in the market outlets, such as stores and pharmacies.

Product design will promote the quality, increase the sales, branding and re-modernise existing finish goods with the use of advertisement and product packaging. Product packaging is one of the product elements and also helps to make the quality of the product stand out in the outcome of retail shelf competition. Package designers (who sometimes work in well-established companies) must make packages interesting, functional and attractive. The Key things in packaging design are concept, attractiveness to the eyes of the customer, identification, protection and simplicity. All these key points enable the products using advertising to compete effectively. The concept is an idea, a master plan designed to suit the packaging of a product. When a package is designed from scratch with proper use of colours, lettering, logo and specification, a company will use it for a long time before changing it. The look of a package design determines the attractiveness of that product in the eyes of consumers. A well-designed work will be attractive at any time it is on the consumer shelf. Any bad package work will never be attractive, no matter how good the quality of the products is. Packaging is one of the tools companies use to sell their products. When a company is known by a particular package, it becomes a source of identification. The company can use the same package with other labels to sell products over time to the consumer. The outstanding use of a company logo and trade name would make the product a source of identification and differentiate it from competitors (for example, Innoson Plastic locker at Emene Industrial Layout, Emene, Enugu and wooden locker at Timber market, Enugu).

The packaging of the product helps to give it protection and makes it neat when the finished product is inside. It protects it from dust, weather and dirt during the buying and selling of the product. Without the protection of the package, the product will spoil in so many ways, such as exposure to air and handling it with dirty hands, among others. In package designing, creating simple work makes the user understand it easily and stands the test of time among other consumer

products on the shelf. The outlook of that particular design will always attract the retailer and the consumer at any time they come across it in the market.

An advertisement is anything that promotes, creates awareness and attention of a product in media, newspapers, magazines and posters. Product advertisement is the process of going through media, newspapers and radio, etc., in maintaining and creating product awareness with potential buyers.

The usefulness of the appropriate design and packaging of industrial products in Enugu State is underutilised. This is because most manufacturers and marketers do not realise that attractive package design is a silent advertiser, both as design elements and the information it contains, including the inside content. Products are not well packaged for domestic and international use. Based on what the researcher saw in the industries. It belittles the product to not be exported in the international market. Products of two major companies, Innoson Technical and Ind. Co., Ltd. Project Development Institute (PRODA) Enugu would be explored and situated in the design. Therefore, the essence of this study is to stimulate package design for some industrial products of PRODA and INNOSON, essentially for beauty and to draw the attention of more customers to these products.

### **Conceptual Clarifications**

The concept or ideas of the work is to enable industries to use a quality design package to package their products, which will promote advertising, increase sales and demand. It will change the look of the product in the market and build the interior package to protect the content product from damage, which is better for fragile products. It helps to reduce the risk of bad handling during transportation, particularly for export.

O'Reilly Media (2020) website describes packaging design as the link of form, structure, materials, colour, imagery, typography, and regulatory information with ancillary design elements to make a product suitable for marketing. It further explains the objectives by distinctively communicating a consumer product's personality and generating sales.

Grace Fussell (2019). How to get started with product packaging design. There is a need for graphic designers to use software to create work. When you are designing packaging, there is a need to consider which program is best for tackling the job of 2D artwork, before it can be forwarded for mass production as vector files. Vector files are scalable, and can use tools in vector programs like Adobe Illustrator or Inkscape. Kelly Morr (2020), Understand packaging layers, many things are in packaging as there are three "Layers" of product packaging: Outer packaging, inner packaging and product packaging. It further mentions that the meaning of the three packaging gives you a chance to tell a part of your story.

For a better explanation of a package, Kotler and Armstrong (2008) explain that packaging involves designing and producing the container or wrapper for a product. The information gathered from the authors explains more about the effects of packaging, such as the purpose of the package, which was to hold and protect the product.

Designhill (2018), the evolution of packaging designs. The product needs to be packaged better to attract customers. It further mentions it is important in catching the attention, leaving a lasting impression and evolving from being simple to functional and artistic. Creating Powerful Brands by Chernatony, McDonald, and Wallace (2011) reveal that Advertising and packaging are crucial in reinforcing the covert message that is signified by the brand. It further

gave a more important example. The rich and exotic package and the lifestyle advertising support perfume brands are crucial in communicating their inherent message.

It is good to advertise new products. In line with this, Shimp (2000), for introducing a new product, rightly says that it is absolutely important for most companies' success and long-term growth can be achieved by adoption of a way to follow. It shows four variable influences on the awareness class: free samples, coupons, advertising and distribution.

Packaging design is a silent advertiser by displaying graphical illustrations of balance, colours, and lettering with the company label. A little shape, use of correct colours, information, and attractive graphics catches the attention of people, making a huge difference. A good package can increase the demand for the product and make the product stand out from hundreds of others on a consumer shelf in a store. (Iniwoo 2017).

Designhill (2019) writes about 12 Creative packaging design trends in 2020. He reiterates that consumers first come in contact with packaging before opening it and seeing the product inside. Also mention that packaging is responsible for making the first impression on consumers when the product is on the shelf, and businesses place so much emphasis on designing their packaging.

In discussing design, Anderson (2011) reasons that drawing sketches is called thumb-nails, because they are miniature versions of possible results. The author gives more reasons to create thumbnails and choose among them by having in mind three aspects of communication: Usability, persuasiveness and content. Reasonably, visualisation in this study applies thumbnail sketches as a means of creative search to organised designs.

Mudit Mittal (2014). Packaging as the stimulus, based on Ivan Pavlov's classical conditioning theory, we can treat the consumers as subjects who get exposed to a product on the shelf, wrapped in its packaging, as the stimulus. The stimulus in this case is heavily cultured to affect the subject's response and achieve a desired consumer behaviour.

A bad package design makes the finished goods inside not attractive and is like a beautiful woman not wearing good clothes to an event, outing, or working on the street. The dressing method of her clothes will swallow the beauty, and people who tend to admire her will be less. The numerous things which go with package design are impact, awareness, colour, simplicity, import and export. It is incomparable to a finished product which is not well packaged.

Ude (2020) Packaging - connection, Perception theory, the consumer uses quality packaging to appreciate a product by looking, buying, touching, reading typography and colour, as the connection of reaction from the customer. The response in this case is basically considered the attitude and way forward to satisfy consumer behaviour.

The brand names of products, Leach (1989) reiterates, thus: Sometimes the customer can feel overwhelmed by the choice! A good sales assistant will be able to help the customer choose between the goods on offer and find the product that meets his or her requirements. The author gives an example of a brand name. Own brand products usually carry a particular Logo or brand name. Like Spar products are identified by a small spruce tree logo.

The way a product can be popular is through advertising. Belch and Belch (2012) reiterate that one of the widely accepted pieces of information is advertisement, which they defined as any paid form of non-personal communication about an organisation's services, products or ideas by an identified sponsor. The author explained more things about doing advertising, like promotion, companies whose products and services are targeted at mass consumer marketing, such as packaged goods and drug companies.

The folding of shape cannot make a package design complete (finished work) without considering the use, purpose and attractiveness of it to the retailer and consumer buyer. Dreaming of good packaged design, can it be achieved? The strategies of great package design are using the principle of design to create and capture the desire-awakening product for the target market. Then, develop a package method that captures the attention of the eyes through the use of concept, colour, graphics and strategic thinking. (Hown 2017)

In this situation, the nature of marketing Moriarty, Mitchell and Wells (2012) reiterate that marketing is the way a product is designed, tested, produced, branded, packaged, priced, distributed and promoted. The information from the author explains an extensive way of marketing by stakeholders, product category and Marketing Mix, which can be called the four Ps, which refers to the product (design, performance), its price, the place where it is made available (distribution) and its promotion (marketing communication). The graphic design must communicate a clear message; establish an emotional link with the consumer, so that the package design is a silent advertiser. This requires the design to convince the consumer that the product will work 'as well', or 'better' than the competition while projecting an enhancing image of the brand.

Package design is different because it has to be functional; then, a billboard simply needs to be hung or stand on the roads, and an orange juice carton must be able to hold juice without leaking. This can be a serious challenge for package designers to face. They need to carefully think of what will make it stand out and be functional among hundreds of others on the shelf. (Brain 2013)

All suppliers must have a product. Evans (1990), the term product does, in fact, as you have probably realised, cover items such as record players, and services such as those provided by colleges, dentists and advertising agencies. The author gave more details of every product, including what we call characteristics, like special features, size, shape/styling, similar products/services, taste, nutritional value, durability, comfort, among others.

The usefulness of packaging Belch and Belch (1998) reiterate that the package is the first thing consumers' exposure to the product, so it must make a favourable impression. It further explains that the package provided functional services such as economy, protection and storage. For other designs, Product packaging is better touchy-feely. That's why customers are to be handled with care by understanding beautiful packaging that attracts them to take the product home (99 Design, 2021).

In designing a brand, Ezeudu (2005) reiterates that branding of a product is a means of differentiating a firm's products from those of competing products. It is so, a business firm may decide to design and develop a new brand name to differentiate its products from other substitutes in the market. It gives more reasons for branding a product, as it should be easy to pronounce, recognise and remember. It should give the buyer the right connotation, it must be legally protected, and that is, a good brand name must not contain words that are in general use. Good work goes a long way. Zettl (1961) agrees that every television show starts with an idea that must then be expanded, developed, and converted into a logical, effective series of visual and audible elements. The author goes further to explain material, cost, script, talent, technical facilities and commercials. Oluken Nig. Ltd, one of the advertising companies that develops ideas for clients and others.

The need in package design, Twomey (2003) posits the question "what is targeting?" Answering it is the process of identifying and reaching specific individuals to attract and retain them as customers. The information from the author explains more about how to create a target

profile that describes who you are targeting, considering the targeting dimensions for consumers and businesses.

In situating the taking stock of more than brands, Insead, Kellogg, and Wharton (1999) reiterate that companies that manufacture consumer packaged goods face a twofold challenge in the marketplace. They have to manage brand image effectively while also managing stock-keeping units (SKUs). Brand may be different on a few perceptual dimensions that convey images and reputation, but consumers typically discriminate among SKUs on the basis of a set of tangible product attributes. The idea from the author explains that the result choice reflects not only a preference for the promoted brand but also a preference for package size and type (medium-sized tubes), product form (gel), formula (tartar control) and flavour (mint).

The usefulness of product Leach (1989) agrees that knowing your product well helps sell goods. Whatever product you sell, the more you know about it and the more you show that knowledge to potential customers, the better you will be at making sales. The author explains more ways you can increase your product knowledge by studying the label, reading the label, packaging/advertising, and finding out what the item is made of, among others.

The increase in sales Leach (1989) also explains that given information on a good advertising campaign will increase sales, but if the products themselves are of poor quality, the improvement will only be temporary. If the products are high quality, customers who have been persuaded to buy them by the advertising campaign will continue to buy, and the increase in sales will be long-lasting.

The advertising and branding stability by Batra, Myers, and Aaker (1996) explains that a brand created in part by advertising is hypothesised to be a barrier to entry and thus to competition. The authors reiterate more of what the industry expected in advertising. He suggested that the advertising helped to encourage the introduction of a new brand, which, in turn, contributed to the lack of brand stability.

Advertising and production by Arens (2006), the author explains that the design process is both a creative phase, in which the designer uses thumbnails, roughs, dummies, and comprehensives, in other words, non-final art, to establish the ad's look and feel. Further explain the prepress (or production art) phase, the artist prepares a mechanical, the final artwork with the actual type in place, along with all the visuals the printer or the media will need to reproduce the ad.

### **Theoretical Framework**

For this study, stimulus theory and packaging – connection theory are considered relevant. There are different and contrary opinions on packaging design from different proponents. The theories that view stimulus and packaging as relatively dependent on production are contrary to the one that sees packaging design as not better, which is ignorant in nature.

Mudit Mittal (2014), in Packaging as the stimulus, based on Ivan Pavlov's classical conditioning theory, we can treat the consumers as subjects who get exposed to a product on the shelf, wrapped in its packaging, as the stimulus. The stimulus in this case is heavily cultured to affect the subject's response and achieve a desired consumer behaviour.

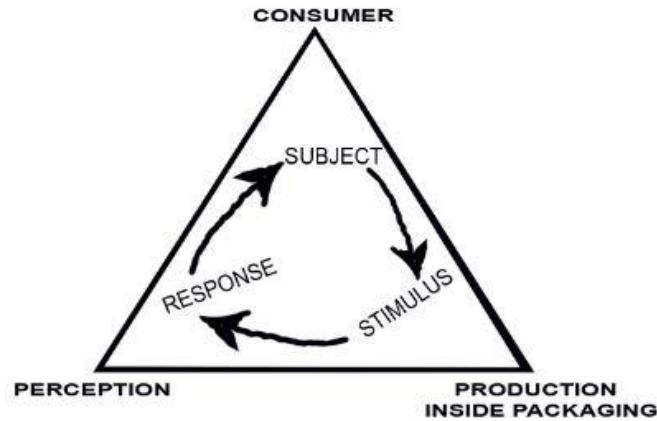


Fig. 1: Ian Pavlo's Stimulus- Response Theory explains the consumer buying behaviour.

Ude (2020) Packaging as the connection, Perception theory, the consumer uses quality packaging to appreciate the product by looking, buying, touching, reading typography and colour, as the connection of reaction from the customer. The response in this case is basically considered the attitude and way forward to satisfy consumer behaviour.

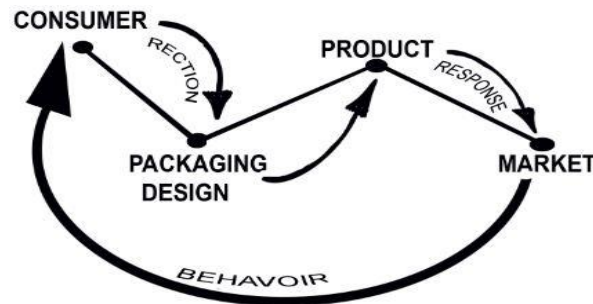


Fig 2: Ude Lawrence Packaging - connection theory explains the consumer reaction behaviour.

### **Methods of Production Design**

The creative process of designing product labels begins with conceptualisation and ideation, often through pencil sketches. This initial phase is about applying different visual elements, such as lines and shapes, to reveal forms on paper. By creating these early sketches, it was possible to experiment with how these elements come together to create a cohesive and functional package design, laying the groundwork for the progressive product label designs. The following are the best of the samples selected:

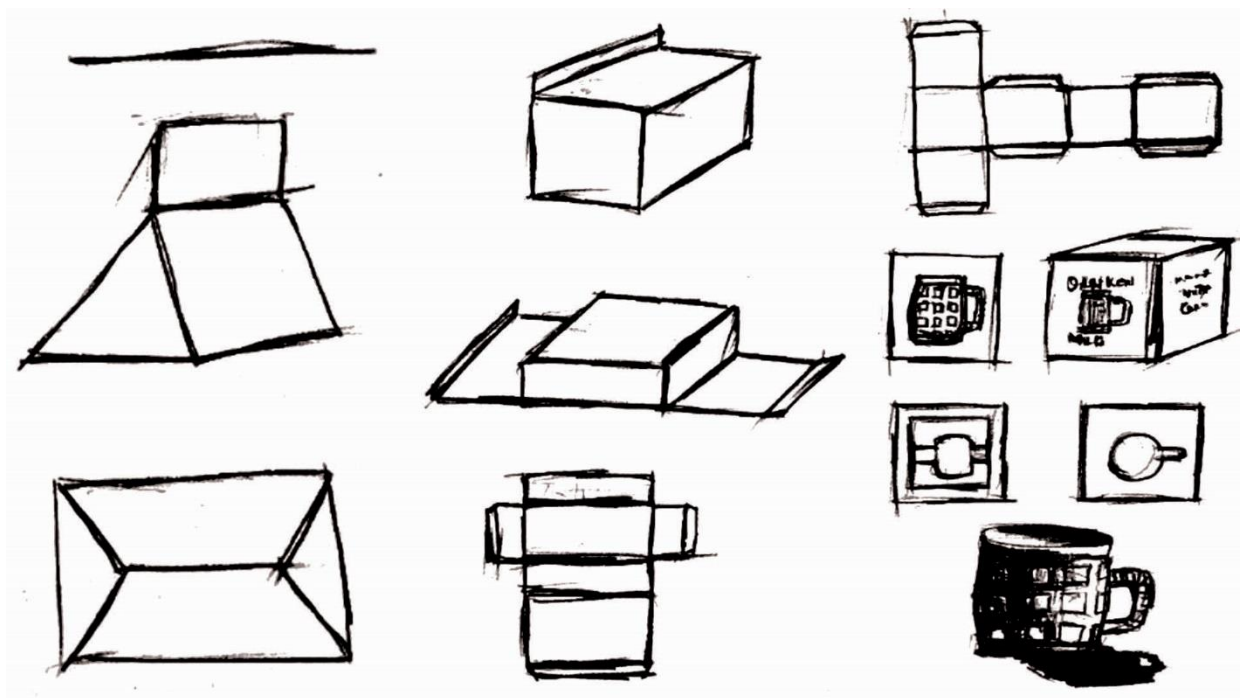


Fig 1: Ideas for labels and package designs. Lawrence Ude, 2020

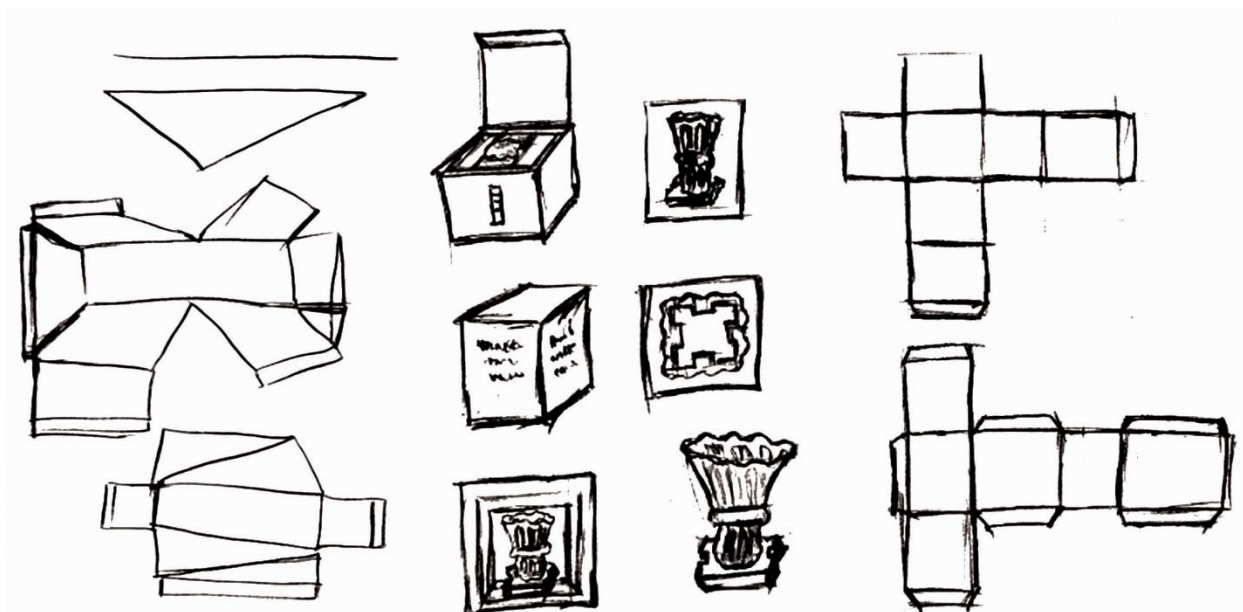


Fig 2: More ideas for labels, package designs and positioning of finished product.  
Lawrence Ude, 2020



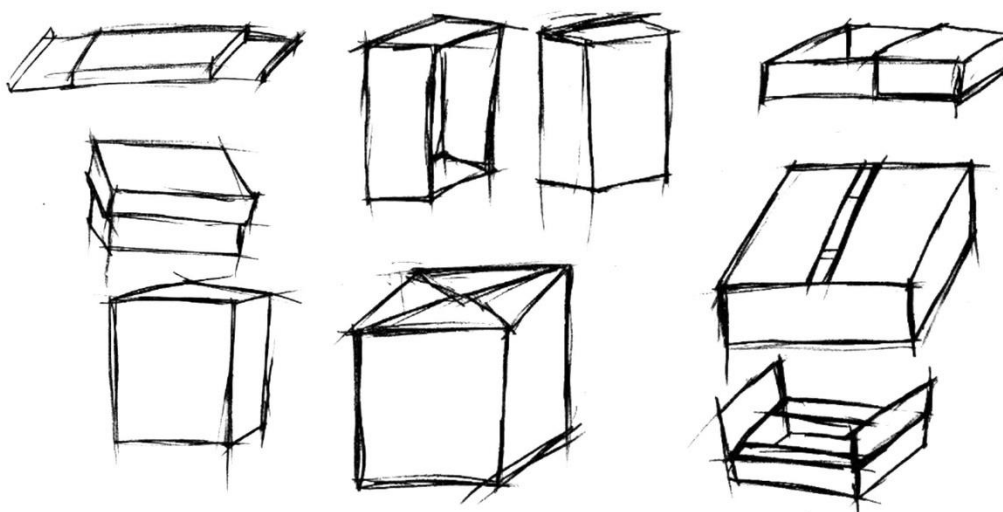


Fig 3: More ideas for labels sketched on paper  
Lawrence Ude, 2020

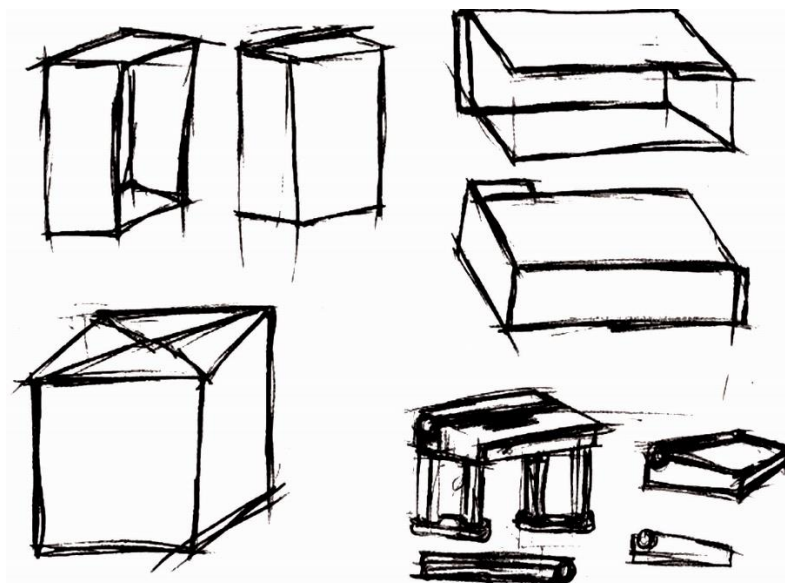


Fig 3: More ideas for labels, with different shapes and sizes, sketched on paper  
Lawrence Ude, 2020



## Design Stage Two:

After developing your initial pencil sketches, the next stage of the design process is to translate those ideas into a digital format. This involves creating a vector line drawing in CorelDRAW to define the dimensions and proportions of the package label precisely. This step is crucial for ensuring that the design is accurate and can be properly scaled for production, moving your concept from a rough sketch to a precise, measurable blueprint.

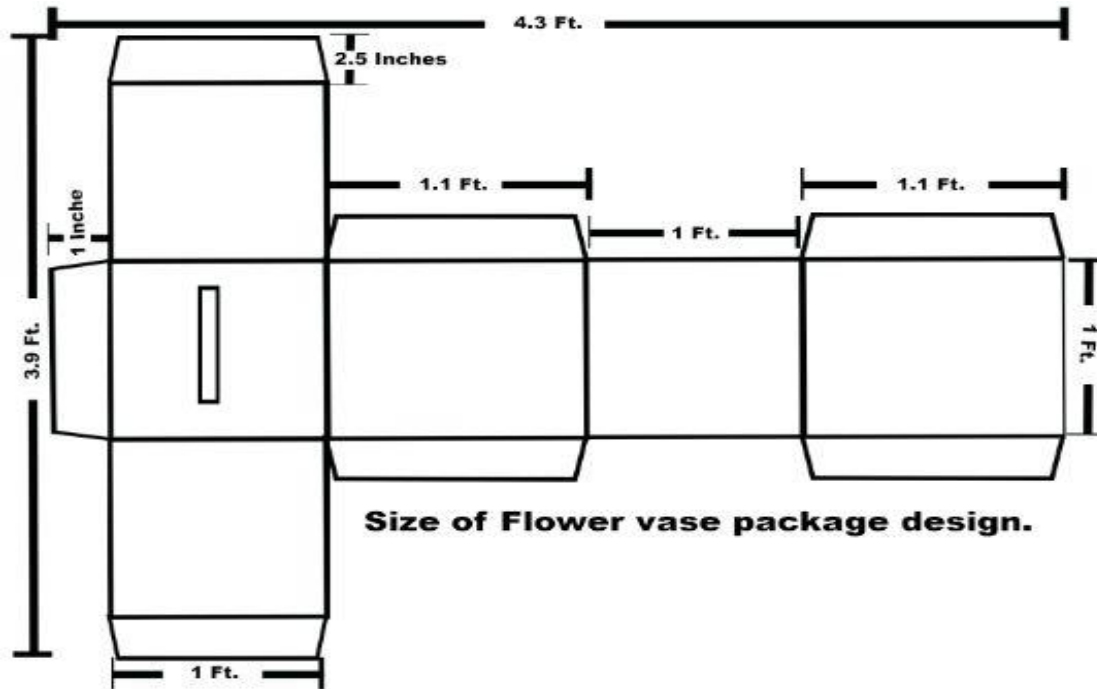


Fig. 5: Detailed computer drawing of a flower vase label with dimensions.  
Lawrence Ude, 2020

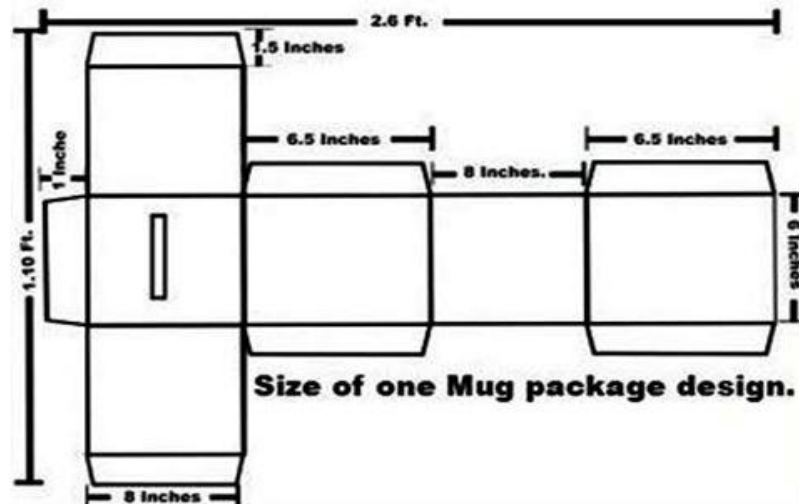


Fig. 6: Detailed computer drawing of a flower vase label with dimensions.  
Lawrence Ude, 2020

## Design Stage Three:

Using 3D software like Houdini or Maya, the next

step in your design process is to create realistic models of both the products and their packaging. This allows for the production of 3D semblances that demonstrate precisely how items like ceramic mugs and flower vases will fit into the finished packages. This stage is crucial for testing and visualising the functionality, fit, and overall aesthetic of the designs before they go into production:

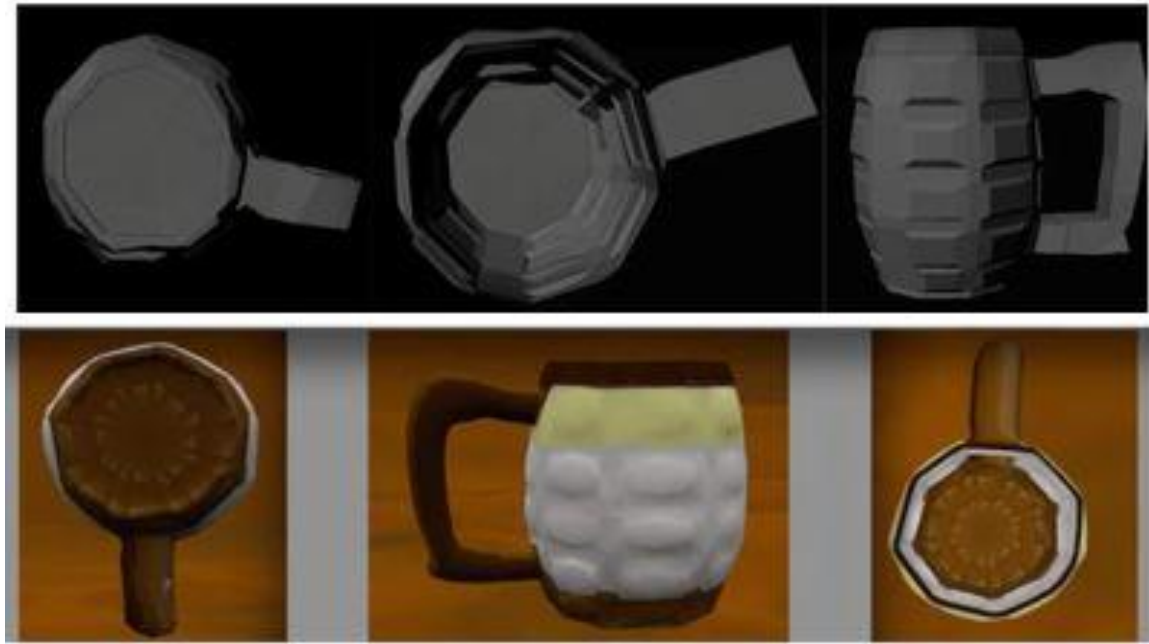


Plate 1: Detailed 3D design stimulation of mug design  
Lawrence Ude, 2020

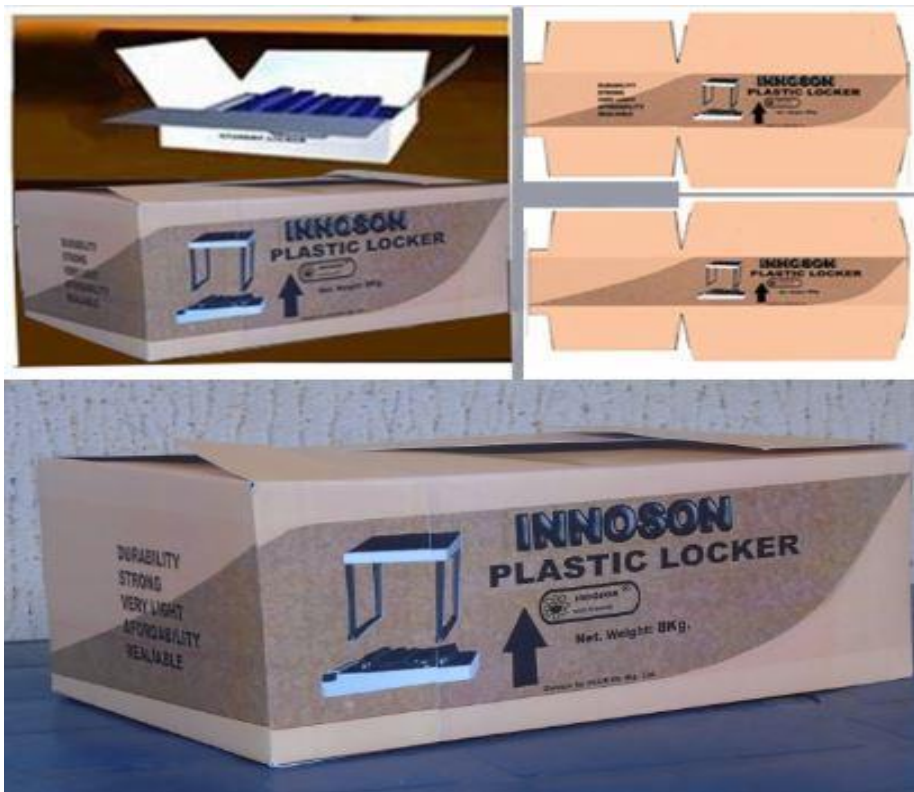
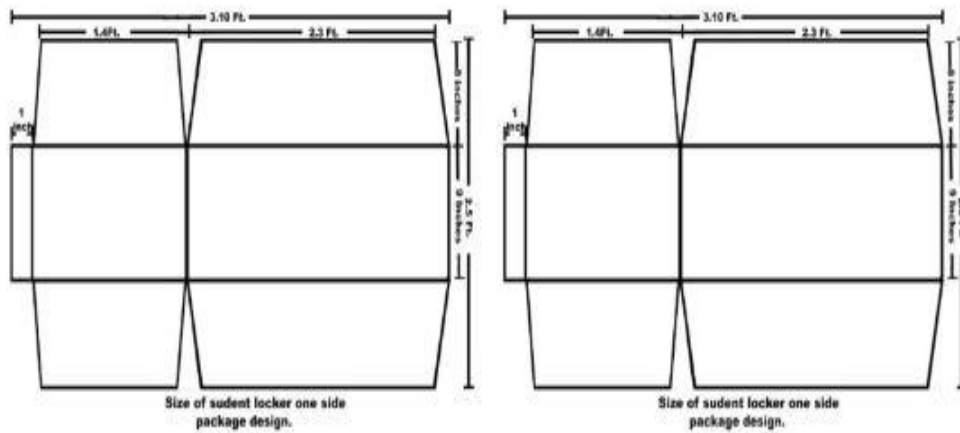
The package design for the ceramic mug was developed through three distinct stages, as illustrated in Plate 2. Beginning on the right, the flat design shows the unfolded, two-dimensional template for the box, highlighting the initial layout and scoring lines. The next stage depicts the flaps and inserts that provide crucial protection, shielding the mug from external pressure and its inherently fragile nature. Finally, the package design box itself is shown in its completed form, showcasing the finished product. To further demonstrate its functionality and structural integrity, a digital prototype of this package design was also created and animated.



Plate 2: The three stages of package design of a mug and a flower vase.  
Designs for RODA, Enugu. Lawrence Ude, 2020

Package design's attractiveness and ability to grab attention are crucial because they're the first point of contact with a consumer. These were the factors put into consideration during ideation. An effective design can stand out in a crowded market and create an emotional connection that influences purchasing decisions. This is achieved through a strategic combination of colour, typography, and graphics. An attention-arresting package design is crucial for standing out on a shelf and connecting with consumers. This is achieved through the deliberate use of three key elements: design, colour, and typography. An attractive and effective design communicates its purpose immediately and emotionally (Artwork Flow, 2024).

**Some finished Models for Innoson Products.**



## Summary

The packaging design of products in two selected industries in Enugu State needs to improve drastically for wider competition, especially for exports. This was the gap that this project research attempted to fill. On the usefulness of packaging, Belch and Belch (1998) reiterate that it is the first thing consumers are exposed to before the product. Therefore, it must make a favourable impression. It further explains that the package provided functional services such as economy, protection and storage. This project work is geared towards improving the method of product package design for industries in Enugu State, which will help to key into the modern product design and packaging practices. The study conducted a mixed method of research to attain this, including the creative process from sketching of ideas, 2D designs based on printing media, 3D simulation and product animation, considering the international standards of packaging design.

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