

# REPORT

## Interactive packaging

### Design Research Seminar

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Guide- Purba Joshi



IDC- School Of Design  
Indian Institute of Technology  
2017



# Declaration

I declare that this written submission represents my own ideas and where other's ideas or words have been used, I have adequately cited and referenced the original sources. I also declare that I have adhered to all the principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any ideas/source/fact in my submission. I understand any violation of the above will be the cause for a disciplinary action by the institute and can also issue penal action from the sources which has been thus not been properly cited or from whom proper permission has not been taken where required.

A handwritten signature in black ink, appearing to read 'Arjun' followed by a stylized surname.

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# Approval

This project titled “Interactive Packaging” is prepared and submitted by Arjun Prasanth in partial fulfilment of the requirement for the degree of ‘Masters in Design’ in Industrial Design. It has been examined and is recommend for approval and acceptance.

A handwritten signature in blue ink, consisting of a large loop followed by a series of strokes that end in a small circle containing the number '11'.

Project Guide



# Acknowledgement

This project is a result of lots of constructive feedback and inspiration from my project guide Prof Mandar Rane and Purba Joshi and their method of understanding a situation to the core level with deep insights. I would like to express my sincere gratitude to all my PD classmates who gave useful suggestions that helped me throughout the design process.



# Abstract

The packaging of a product is what connects the consumer to the product. It is the outer shell, the apparel of the product.

**I**nteractive packaging enhances the user experience of the product in accordance to the context of its usability aspect with the additional values of interaction elements for the user to make the it more exciting and engaging.

Extensive study has gone into this paper which includes everything from literature review to analysis of different types of packaging to bring out a clear definition for interactive packaging. The similarities and differences among smart, intelligent and interactive packaging is been analyzed.

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## Methodology

- Research on various types of packaging available on the market and exploring renowned products and packaging design examples around the world, Study on the various types of interactions between consumer and product and its packaging.
- Understanding the target audience, the need and sense of response to the product.
- Understanding the relation between Packaging/product and the Consumer in aspects like usability, background, affection and need etc.
- Selection of a specific product range to work on
- Exploration of Materials, Mechanisms and technology - Sensors, PoP packaging etc.

# THE FACTORS THAT MAKES A PRODUCT AND ITS PACKAGING INTERACTIVE WITH THE USER

## Design aspects

- In the context of modern age, how people respond to products and how the features are imbibed and conveyed through it.
  - How packaging helps to add extra value to the product.
  - Multiple usability of packaging in various scenarios.
  - Work on the graphics part which enables to convey the message more efficiently to the user.
  - Formulating a scenario through design elements in which the user experience is enhanced through packaging.
  - Packaging design with efficient usage of material in effect with the cost management of the entire system
- 
- Interactive packaging enhances the overall user experience of the product as well as connects the user to the product's goals efficiently - such as an emotional affection, a social cause, an additional handy element etc.
  - There are infinite possibilities for this area. But attaining an adorable as well as effective interaction is challenging to develop. The packaging should be highly desirable for the target audience. It should possess emotional and interactive elements which makes the user gets the most of the product goals. Incorporating new technologies like sensors, RFID would help in bringing in new innovations for this area.

## How packaging is connected to the customer?

The designs standing out from the rest, or subtly in merge with other products in the shelf?

Certain features will get registered in the brain as the customer uses the product. As a matter of subjectivity the sense of connectivity can occur from the first sight of the product in the shelf to even after using the product. A packaging design can stay in the mind consciously or unconsciously with the intention of register the brand of the product for increasing the sellability and the buyer who has bought the product to recommend to other people which in turn spreads the word regarding the experience the product has provided.

A packing can revoke the childhood memories that he has been missing from him for a long time

It is a good marketing strategy as the childhood emotions would running high on everyones heart and some of the factors that enhances that triggering of the memories which a person can relate and has a resemblance of the feel of the era they have been grown up are

- Shape
- Colour
- Font
- Size
- Material

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## Nostalgia and novelty



The transparent vessels were left without stickers, a choice that keeps the cooking oils from looking too cluttered. Minimal text was applied to describe the products and to mark them with their brand name. Usage of jam jars was a thoughtful one too. Fatworks oil packaging might remind you of your own domestic practice of emptying grease and lard into re-used glass containers. This idea communicates a sense of trusted home-cooked quality.



A simple folded box was made more interesting when the inspiration of the brand is represented in the full form. A form which is as succulent as the product inside enhances the overall experience for the user.



Parle G, even the name evokes lots of emotions and homeliness in every Indian's mind has maintained the quality that has been carried down to generations.

The graphics and visual representation in the packaging has the touch of vintage essence in it.

The product is being marketed as a snack which can be consumed with tea with the family members or while reading newspaper in the morning. A catalyst to enhance the bond between the family members is an excellent strategy to increase the marketability of the product and the target audience is in a larger fraction of the society.

# Graphics

The graphical design influences the overall attire of the product



5 main types of printing used in packaging are

1. Lithography
2. Flexography
3. Digital
4. Rotogravure
5. Silk screen

Deep impression printing

Different types of print has different feel and mannerism to it. Finish and texture plays an important part in the touch and feel of the product. It depends upon the functionality of the product eg. the coca cola and chocolate packaging is different in all circumstances when looked into the totality of the products.

## Conveyance of information

The information regarding the details of the product need to be conveyed properly to everyone.

The text is to be readable, understandable and communicable to the buyer.

The text spacing and paragraph spacing is decided depending on the legibility of the information. Some companies tries to hide some valid information regarding the product intentionally so that it is not really catches the eye of the buyer at the first glance. There was a swindle regarding the sugar content information embedded in the cans and labels of coco cola Inconspicuously was raised against the information embe



The information regarding date of manufacture, expiry date, ingredients, nutrition information bar code etc is to be mentioned in the package of the product( especially eatables). The ingredients is to be revealed in order for the buyer to check the compatibility of the health related factors and so as to convince themselves to intake the product without having any second thoughts.

## Reaching product dynamics to all sectors of people

The product dynamics should reach and satisfy the needs of people. The design nature cannot necessarily influence all types of people, but a sense of understandability and visual balance should be instigated in all kinds of people's mind.

## Text content & Typography

Distinctive Typography treatments are applied to create a visual identity. In order to provide emphasis on the branding of a product, font and its size are chosen efficiently so that there shouldn't be any legibility issues for the buyer. Cluster free texts helps to give focus on the more important aspects to be visible in the design.



Simple and subtle designed typography and

## Activity that enhances the usability of the product

Making the product engaging with the user, the task with which the product is entitled becomes exciting and engaging. Even in the absence of any extra feature that triggers the activity, the process can be enhanced by the simple addition of involvement of human interaction, like opening and closing of the packaging.



Zube Squeezable wine

Allows you to get even the last drop of wine. The activity makes the person get engaged with the product while in doing the activity.

## THE FACTORS THAT MAKES THE PRODUCT MORE SELLABLE

## Adding extra value

Making the things more interesting. Adding the feature of playfulness to the whole system creates a sense of interaction between the buyer and the product. Such a design approach would savour of creativeness and improbable outcomes. In order to attain the connection between the buyer and the product different elements are to be taken care of which in turn affects the sellability of the product.

The look and feel of the product, the way the product has been taken out from the shelves and the character of the product insists the customer to interrogate themselves regarding the buying of it for a certain need. There will be n number of products which caters the same necessity and functionality

## Multiple usability of packaging

Packaging can be incorporated with extra features that caters the extra functionality of the product itself or a totally new feature of the product. Designers are trying to bring in lots of multiple functions in the product to make it more interesting and exciting for the buyer. More and more features at the same price with the addition of design element, slight nuances creates lots of opportunities in the future run of the product.

Efficient use of the material in respect to the usability of the product and variance in the design aspect leads way to multiple functionality of the product.



The packaging is converted to a disposable plate with a clean surface to place the food.

In the overall system a junk of material can be saved by incorporating multiple functionality to the product.



## Multiple usability of the packaging



Mc bike is a packaged food container that is designed specifically to fit onto bicycle handlebars. It caters to the people who use bicycles and the increasing popularity of bike culture paved the path of the concept of a system which accommodates a burger, fries and a drink and can be carried in bicycles. This facilitates an eco friendly system of commuters and the concept of transport of food on the go.

It caters to a certain honour of people, may or may not be valid to other group. Adding certain simple and flawless design changes

## Gamification of the system

Children friendly packaging connects with them efficiently with the interactive board game packaging which also gives insights about eating healthy.

In pursuit of improved consumer engagement, brands are gamifying their businesses, creating playful products and campaigns that change the relationship with the consumer.

Playfully interactive packaging gives in a sense of happiness in the minds of consumers of the product. Attracted by all age group , a certain element of fun will bring in a smile in buyer's face and engages with the product in a way that the packaging can be converted to as a time passing activity object.



Board game jam packaging



## Colours? Design itself?

Colour being one of the most important deciding factor in buying a product, the customer should be satisfied and ingrained in his brain, the colours that consists the packaging design. And more likely, the customer would recall the colours rather than the name of the product( if the product is new in the market). Combination of new and exciting colours facilitates the buyer to have a glance at it and stands out from the rest of the products in the shelf.



## Involvement of technology

Involvement of Technology adds in feature of Multiple usage of packaging. The concept of eating pizza and watching movie comprehends the overall design.



Encouragement to brands and design agencies to embrace technology to bring accountability and objectivity to the design work they are doing today. Across the industry, design is under-funded and under-appreciated, which is a function of not being able to measure and qualify its impact consistently. There are scalable and cost-effective technologies available now that empower brands to measure their design impact just as they would any other areas of marketing spend—ultimately helping to improve their brand position in the market. Moreover, technology has the power to remove subjectivity from the design process and give consumers a stronger voice in deciding what to launch to market. When brands involve consumers early, we know they are more successful and that they launch designs that are much more creative and impactful.

## FEASIBILITY OF THE CUSTOMERS TO BUY PRODUCTS

Packaging reflect the functionality of the product?  
Design language of the product?

## Part of the product visible through the packaging?

**Completely hidden, giving surprise to the customer?**



The fractional visibility of the product excites the buyer to have a glimpse of it and if the outer packaging is in relation to the inside product , it increases the level of anticipation in the mind of the buyer. The inside product can act as a design element and adds value to whole package. Curiosity is invoked in the minds of the customer that results in trying the product atleast once. If the product has reached the expectetions there is a high chance of success rate of the product.

## Can the usability of the product can be manipulated by its packaging design?

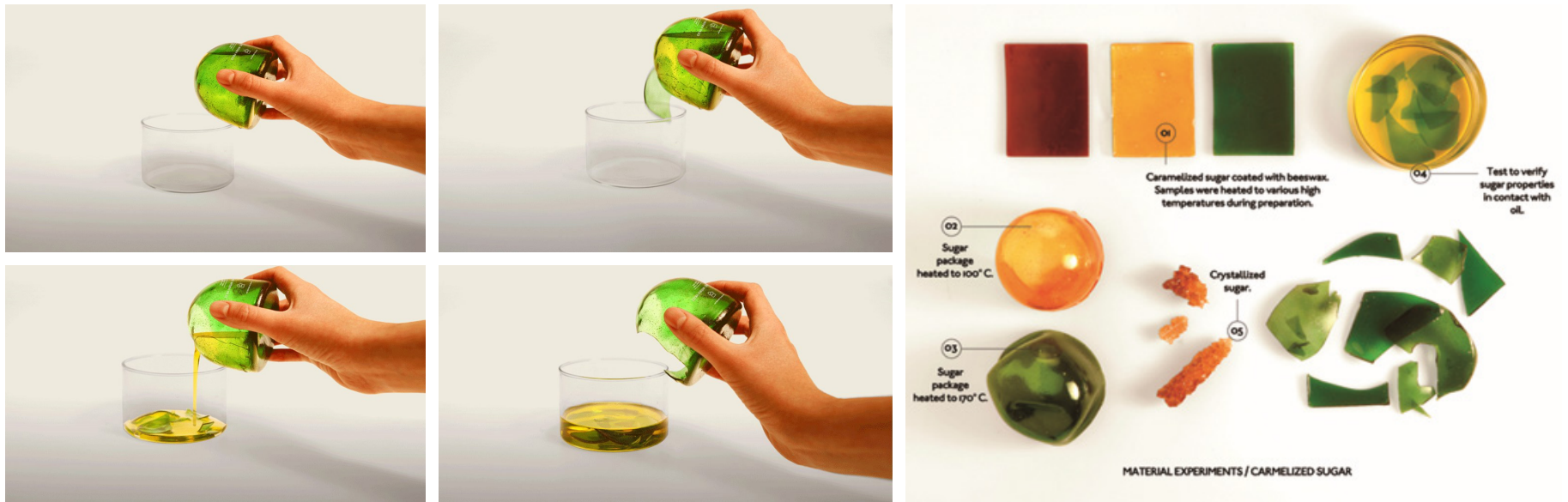
**Is it acting true to the customer?**



Majority of the population is highly influenced by the packaging design alone for the first experience of the product. If the quality of the product is also upto the mark in comparison to its packaging, its a success of the particular brand. But masking the flaws in the quality of the inside product with eye catching packaging is not appreciable and is misleading.

## Sustainability

Material usage? Or less material wastage? Or biodegradable?  
Edible bags?



A package made of caramelized sugar, coated with wax. To open it you crack it like an egg. When the material is cracked the wax do no longer protect the sugar and the package melts when it comes in contact with water. This package is made for oil-based food.

## Design of packaging system

Packaging of a single product affects the whole of the system while transporting?



While transporting, stacking of packages effectively and creating space availability for accommodating a larger number of product in a given square metre of area is an important criteria in deciding factor for the design of a single unit. Design of an individual unit affects the whole system arranging and transporting. Space saving is another the major criteria in the system design.

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