UNIT-2 IDEATION & CONCEPTUAL DESIGN

- Design ideation can be seen as a matter of generating, developing and communicating ideas, where 'idea' is understood as a basic element of thought that can be either visual, concrete or abstract.
- In the <u>Ideation</u> stage, design thinkers spark off ideas in the form of questions and solutions through creative and curious activities such as Brainstorms and <u>Worst Possible Idea</u>. In this chapter, we'll introduce you to some of the best Ideation methods and guidelines that help facilitate successful Ideation sessions and encourage active participation from members.

- "Ideation is the mode of the <u>design process</u> in which you concentrate on idea generation. Mentally it represents a process of "going wide" in terms of concepts and outcomes. Ideation provides both the fuel and also the source material for building prototypes and getting innovative solutions into the hands of your users."
- The main aim of the Ideation stage is to use <u>creativity</u> and <u>innovation</u> in order to develop solutions.

https://medium.muz.li/what-is-a-design-concept-how-to-master-it36abc63f81 b0#:~:text=Literally%2C%20it%20means%20'an%20abstract,thorough%20u nderstanding%20of%20end%20user.

Ideation Will Help You:

- Ask the right questions and innovate.
- Step beyond the obvious solutions and therefore increase the innovation potential of your solution.
- Bring together perspectives and strengths of team members.
- Uncover unexpected areas of innovation.
- Create volume and variety in your innovation options.
- Get obvious solutions out of your heads, and drive your team beyond them.

Why Ideation and Conceptual designs are important.

Ideation is often the most exciting stage in a Design Thinking project, because during Ideation, the aim is to generate a large quantity of ideas that the team can then filter and cut down into the best, most practical or most innovative ones in order to inspire new and better design solutions and products.

Conceptual designs help to create a clear user interface which is easy to understand and interpret. It helps to describe the roles of different users and their requirements in detail so that the project is better understood from the offset.

Basic Elements of Design

Line
Color
Shape
Space
Texture
Typography (fonts)
Scale (Size)
Dominance and Emphasis
Balance
Harmony

• Market demand (def) - It describes the demand for a given product and who wants to purchase it. This is determined by how willing consumers are to spend a certain price on a particular good or service.

HOW TO RESEARCH MARKET DEMAND

* Knowing market demand can help inform future *online businesses* what industry is most profitable to enter into.

Therefore, many business owners will have to conduct market demand research.

A Marketing research involves seeking out studies, data and general information about an industry or sector.

It often requires several different approaches, an organized method of accumulation figures, careful interpretation and <u>detailed reporting</u>.

However, that doesn't mean new entrepreneurs need an entire marketing department to find out about market demand.

There are methods used for conducting Market research:

- 1. Surveys
- 2. Experiments
- 3. Observations

Surveys Social media networks are excellent places to post surveys about products, industries and services. Find out what friends and family have to say about a particular need or idea.

Send out a survey in an email, asking everyone to forward it to three additional people. The greater scope a business owner can use, the better their market research will be.

There are also many surveys and case studies available for download online.

If making business decisions based on these documents and reports, be sure to check the sources and look into how the data was acquired. Some surveys are geographical or target a specific audience, which can both skew results.

2. **Experiments:** Designing experiments is time consuming and expensive, but can be beneficial to an ecommerce store. For example, offering a new product <u>at a discounted price</u> for a limited time is a good way to experiment with it and find out how customers like it. This requires a lot of customer interaction and a steadfast commitment to tracking results over time.

3. Observations:

Simply looking around – both in the physical and the digital worlds – can give huge clues about market demand.

Observing trending topics and products on sites like Twitter and Pinterest can lend insight into almost every industry.

This can also include reading local newspapers or publications within the region in which an ecommerce store owner would like to see his or her products.

Data types

Different data types require unique analytical approaches.

Primary data accounts for any new information gleaned specifically for the purpose of the research. This includes any feedback entrepreneurs receive from online after making a direct ask for input.

Secondary data refers to any information available already to the business owner. This includes any previously completed studies, past questionnaires or information collected from another source for a similar scenario.

• *Both types* of data are valid to use toward market demand research, though it's necessary to note the dates on past documents.

On one hand, markets change quickly and anything outdated could be detrimental to the research.

On the other hand, they can provide an insightful analysis of how the market has evolved over time.

This would allow ecommerce merchants to better predict future trends and align their business procedures accordingly.

 Product lifecycle management (PLM) refers to the management of data and processes used in the design, engineering, manufacturing, sales, and service of a product across its entire lifecycle.

PRODUCT LIFE CYCLE

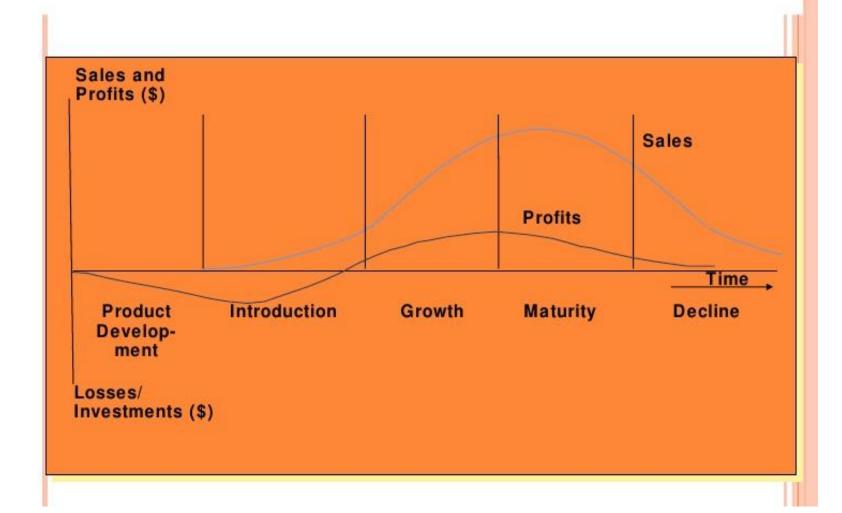
DEFINITION:- The stages through which the individual products develop over a period of time is known as product life cycle.

- ☐ The product life cycle concept is derived from the fact that a given product's volume and revenue follow a typical pattern of four —phases cycle. This life cycle is the representative fact of the existence of every product.
- ☐ If we plot a graph of sales volume versus time for a product, generally, the PLC represents a bell- shaped or s-shaped curve.

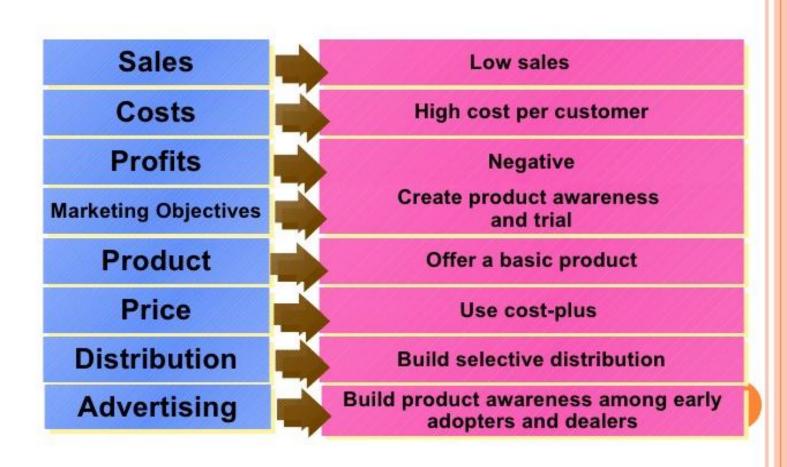
THE FOUR STAGES OF PRODUCT LIFECYCLE

- Introduction
- ☐ Growth
- Maturity
- Decline

CYCLE

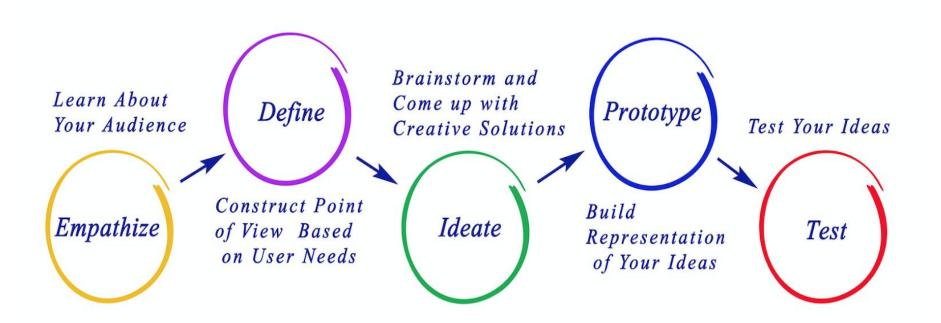


INTRODUCTION STAGE OF THE PLC



See details in plm ppt

Design Thinking Process





Capturing Voice of the customer (VOC)

✓ Voice of the customer is a term used in business and Information Technology to describe the in-depth process of capturing customer's expectations, preferences and aversions

- ✓ Voice of the Customer is how companies hear and listen to customer feedback about their brand, products and services.
- ✓ Voice of Customer solutions help you gather that feedback and turn it into useful data and insights at scale.
- ✓ Data-driven Voice of Customer (VoC) analytics programs are proven to increase customer lifecycle value and lower customer churn.
- ✓ There are six steps involved in building an effective VoC analytics program:

- 1. Identify a question
- 2. Gather and prepare data
- 3. Choose your tools
- 4. Analyze and troubleshoot
- 5. Draw conclusions
- 6. Take action

What is Voice of the Customer?

- According to SixSigma, Voice of Customer is "the customer's voice, expectations, preferences, comments, of a product or service in discussion.
 - It is the statement made by the customer on a particular product or service."
- Therefore, a Voice of Customer analytics program is a structured system of feedback collection, data analysis, and action planning.



TRIZ is the Russian acronym for the "Theory of Inventive Problem Solving," an international system of creativity developed in the U.S.S.R. between 1946 and 1985, by engineer and scientist Genrich S. Altshuller and his colleagues.

Go through TRIZ ppt.

Intellectual property rights (IPR) are legal rights aimed at protecting the creations of the intellect, such as inventions, the appearance of products, literary, artistic and scientific works and signs, among others.

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. signs, among others. (Eg. Piece of land or vehicle)