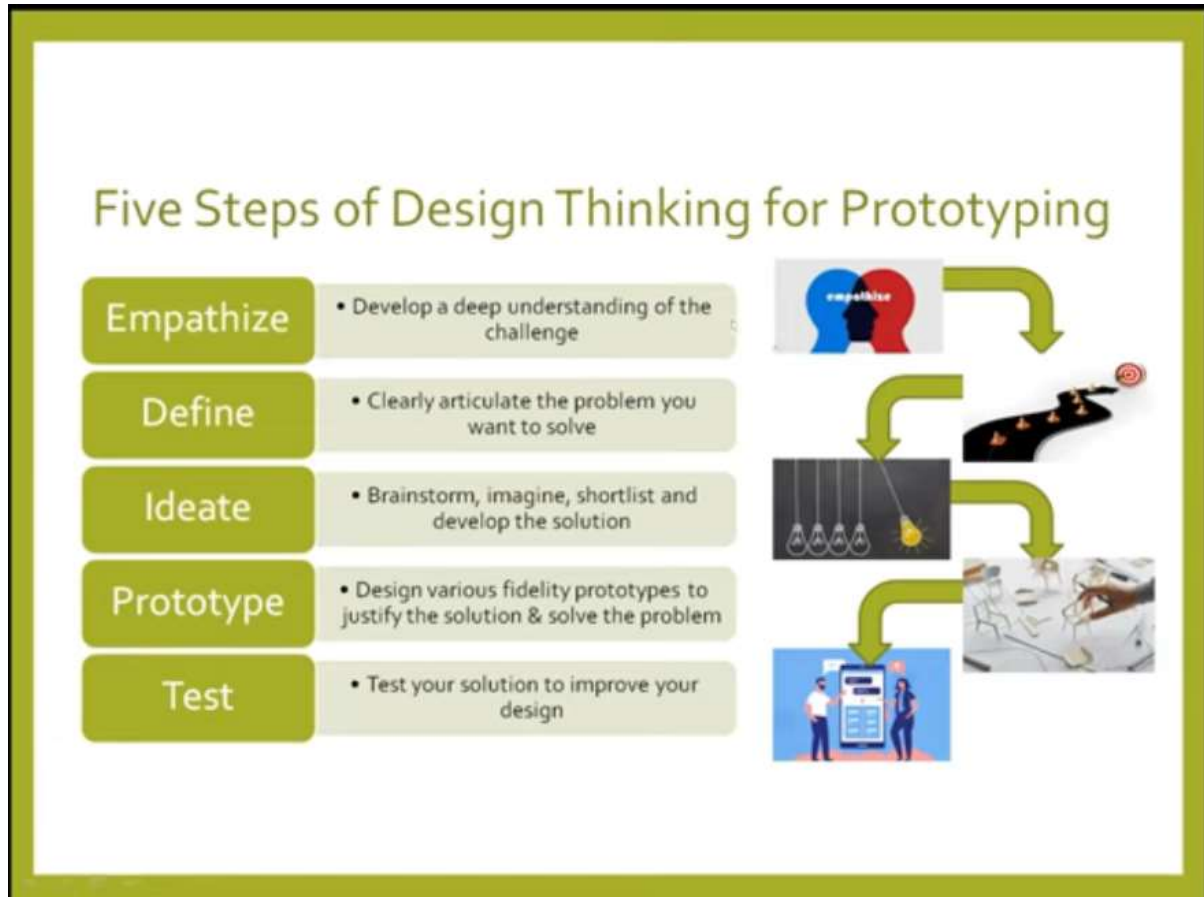


Organization of Workshop on Prototype or Process Design and Development



Some Innovated Products

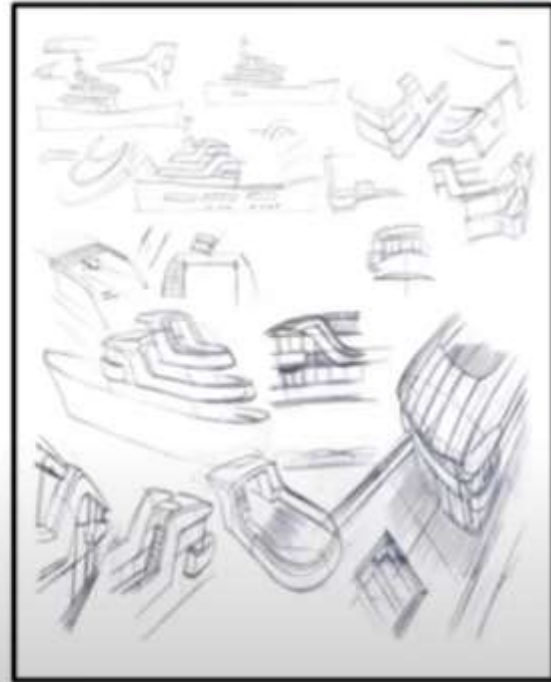
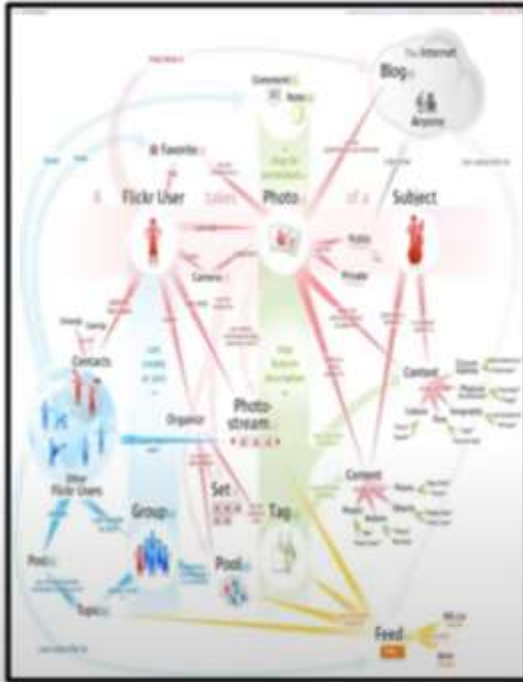


CONCEPTUAL MODELLING



- ❖ A **conceptual model** is a representation of a system, made of the composition of concepts which are used to help people **know, understand,** or **simulate** a subject the **model** represents.
- ❖ The term conceptual model may be used to refer to models which are formed after a **conceptualization** or **generalization** process.
- ❖ Some models are physical objects; for example, a **toy model** which may be **assembled**, and may be made to work **like** the **object** it represents.
- ❖ Designers should consider systems, services and products in relation to *what they should do, how they should behave, what they look like and whether they will be understood by the users in the manner intended.*

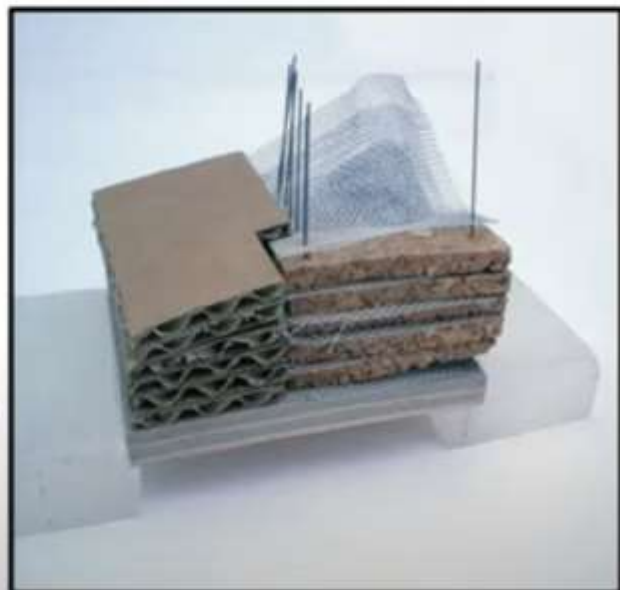
Conceptual modelling Examples



Flow Chart or Concept map for Application Flickr

Graphical conceptual Model

Physical Conceptual modelling Examples



PHYSICAL MODELLING



- ❖ Designers use physical models to **visualize** information about the context that the model represents.
- ❖ It is very common for physical models of large objects to be **scaled down** and **smaller objects** scaled up for ease of visualization.
- ❖ The primary goal of physical modelling is to test aspects of a **product against user requirements**.
- ❖ Thorough testing at the design development stage ensures that an **appropriate product** is developed.
- ❖ Physical modelling not only allows designers to **explore** and **test** their ideas, but to also **present** them to **others**.
- ❖ Engaging clients, focus groups and experts to interact with physical models of products allows designers to **gain valuable feedback** that enable them to **improve** the design and **product-user interface**.

APPROACHES TO PROTOTYPE/PRODUCT INTEGRATION



❖ **throw-away**

- prototype only serves to **elicit user reaction**
- creating prototype must be **rapid, otherwise too expensive**

❖ **incremental**

- product built as **separate** components (modules)
- **each** component **prototyped** and **tested**, then added to the **final system**

❖ **evolutionary**

- prototype altered to **incorporate** design **changes**
- **eventually** becomes the **final product**

Aesthetic & Concept models



- ❖ An appearance prototype that **looks and feels** like the final production product, but, **does not function** or operate in any way.
- ❖ Aesthetic/appearance models are only concerned with **form, color, style, texture** and how the **product fits** in its **visual environment**.
- ❖ They can be used for **ergonomic testing**, evaluating **visual appeal**, allow the **non-designer** to see and feel how the **real product** will be.



+

IDEO SURGICAL TOOL PROTOTYPE (Medium fidelity prototype)



Prototyping of HANDHELD "UNIVERSAL REMOTE CONTROL" (Medium fidelity Prototypes)



High Fidelity Prototypes



CAR HI-FI model

Some Example for PROTOTYPING



Some Example for PROTOTYPING



PROTYPE
(ready use of function)



WEARABLE PRODUCT
(design solution of design and technology)



Thank You!

Don't get attached to a prototype
"Because it may need to be thrown away"



Offline Program is organized for students and faculty

Report on Workshop on Prototype and Process Design and Development

Executive Summary: This report encapsulates the essence and outcomes of the Workshop on Prototype and Process Design and Development, aimed at assisting entrepreneurs and innovators in creating effective prototypes and refining their development processes. The workshop integrated practical exercises, case studies, and expert insights to equip participants with the skills and knowledge necessary for successful prototype and process design.

Introduction: The Workshop on Prototype and Process Design and Development was organized to address the critical aspects of designing and developing prototypes, as well as refining the underlying processes to ensure efficiency and effectiveness. By providing participants with practical tools, methodologies, and best practices, the workshop aimed to enhance their ability to translate ideas into tangible prototypes and streamline the development process.

Workshop Objectives:

1. To educate participants about the importance of prototype design in the product development lifecycle.
2. To guide participants through the process of creating effective prototypes using various tools and techniques.
3. To facilitate discussions and exercises aimed at optimizing development processes for enhanced efficiency and innovation.
4. To provide participants with actionable insights and strategies to improve their prototyping and development practices.
5. To help students to develop their new product ideas in refined manner. To make them ready for real life innovative ideas. To help students to safeguard their invention.

Workshop Agenda:

1. **Introduction to Prototyping:** Overview of the importance of prototyping in product development, different types of prototypes, and the prototyping process.
2. **Prototyping Tools and Techniques:** Exploration of various prototyping tools and techniques, including rapid prototyping, 3D printing, wireframing, and mockups.
3. **Hands-on Prototyping Exercises:** Practical exercises and group activities to help participants create prototypes for their own ideas or projects, with guidance from expert facilitators.
4. **Process Design and Optimization:** Discussion on process design principles, including lean principles, agile methodologies, and continuous improvement practices.
5. **Case Studies and Best Practices:** Analysis of real-world case studies and best practices in prototyping and process design, highlighting key success factors and lessons learned.
6. **Expert Guidance and Mentorship:** One-on-one mentorship sessions with experienced entrepreneurs and product development experts to provide personalized guidance and feedback on participants' prototypes and processes.

Workshop Format:

- The workshop was structured as a blend of presentations, interactive exercises, group discussions, and mentorship sessions to foster engagement and collaboration among participants.
- Expert facilitators with practical experience in product design, prototyping, and process optimization led the workshop sessions, ensuring participants received guidance from industry professionals.

- Participants were encouraged to actively participate in hands-on exercises, share their experiences, and seek feedback from peers and mentors to enhance their learning and problem-solving capabilities.

Key Outcomes:

1. **Improved Prototyping Skills:** Participants enhanced their prototyping skills and proficiency in using various tools and techniques to create effective prototypes for their ideas or projects.
2. **Streamlined Development Processes:** Participants gained insights into process design principles and methodologies for optimizing development processes, leading to increased efficiency and innovation.
3. **Actionable Insights and Strategies:** Participants received actionable insights and strategies for improving their prototyping and development practices, enabling them to iterate quickly and effectively based on feedback and insights.
4. **Empowerment and Confidence:** Participants left the workshop feeling empowered and confident in their ability to design and develop prototypes, as well as streamline development processes for enhanced success and competitiveness.

Benefits

It creates a model of the final product. It can help lure customers to invest in the product prior to any resource allocation for implementation. You can discover design errors and check their correctness before going into production.

Coordinator

Dr. P. H. Zope